2001
Countywide Transportation Plan
for
Sonoma County

ADOPTED
September 10, 2001

2001 Sonoma County Tranpsortation Authority Board of Directors

Mike Kerns, Chair
Sonoma County

Robert Jehn, V. Chair
Cloverdale

Joe Costello
Sonoma

Geoffrey Fox
Cotati

Mark Gleason
Healdsburg

Mike Healy
Petaluma

Paul Kelley
Sonoma County

Jake Mackenzie
Rohnert Park

Larry Robinson
Sebastopol

Sam Salmon
Windsor

Tim Smith
Sonoma County

Sharon Wright
Santa Rosa

Suzanne Wilford, Executive Director
Janet Spilman, Transportation Planner
Jeanette Wood, Executive Assistant

www.sonoma-county.org/scta

520 Mendocino Avenue
Suite 240
Santa Rosa, CA 95401

Phone: 707-565-5373
Fax: 707-565-5370

Special thanks to the Technical Advisory Committee and the Citizens Advisory Committee for their input and expertise.
Thanks also to the Geographic Information Systems division at Sonoma County for maps featured in this Plan.

Chapter 1

Introduction

TRANSPORTATION PLANNING

The Sonoma County Transportation Authority (SCTA) acts as the countywide planning and programming agency for transportation related issues. Be it funding for buses, project oversight for Highway 101 or planning for future passenger rail, the SCTA plays a leading role.

The SCTA has various legal and administrative requirements to fulfill in the capacity of a countywide transportation agency – some of these requirements are derived from regional agencies such as the Metropolitan Transportation Commission, Caltrans and the Bay Area Air Quality Management District, while others come directly from the state or federal governments.

The *2001 Countywide Transportation Plan for Sonoma County* is the latest countywide planning document approved by the SCTA. The purpose of the plan is primarily to update past transportation planning efforts in order to prioritize transportation needs throughout Sonoma County.

The importance of maintaining an updated planning document is two-fold. First, the Metropolitan Transportation Commission requires local transportation authorities such as the SCTA to establish transportation plans that can feed into the larger Regional Transportation Plan (RTP). The RTP is a federally required, 25-year planning document. Second, the SCTA is responsible for programming numerous state and federal funding sources to transportation projects. In order to meet this requirement, the SCTA needs a policy and planning document to help guide the programming process. If the SCTA does not meet these two requirements it is at risk of losing critical transportation dollars.

The *2001 Plan* is a multi-modal plan that incorporates past efforts such as the *1995 Congestion Management Plan,* the *Sonoma/Marin Multi-Modal Transportation and Land Use Study*, and the *Sonoma County Transportation Authority's Getting Around Sonoma County in 2020…A Vision for Our Future*. The *2001 Plan* is also built on the efforts of local elected officials and staff from the cities and the County of Sonoma.

Mission Statement

As a collaborative agency of the cities and County of Sonoma, we work together to maintain and improve our transportation network. We do so by prioritizing, coordinating, and maximizing the funding available to us and by providing comprehensive, countywide planning. Our deliberations and decisions recognize the diverse needs within our county and the environmental and economic aspects of transportation planning.

Overall, the *2001 Plan* is meant to refine the vision, goals, and objectives for improving mobility on Sonoma County's streets, highways, transit system and bicycle/pedestrian facilities. To that end, the *2001 Plan* provides policy guidance and specific transportation improvements for development over the next 25 years.

SONOMA COUNTY TRANSPORTATION AUTHORITY

The Sonoma County Transportation Authority, SCTA, was formed as a result of legislation passed in 1990. Proposition 111 resulted in changes to the way transportation projects are planned and funded. This lead to the formation of Congestion Management Agencies for most of the counties in the State. In November 1990, the SCTA was formed under the Local Transportation Authority and Improvement Act (Public Utilities Code Section 180000) and designated as the Congestion Management Agency for Sonoma County. In 1997, the SCTA relinquished its position as the CMA under new state legislation that made this function optional. The SCTA now serves as the coordinating and advocacy agency for transportation funding for Sonoma County.

Membership of the SCTA

The SCTA is governed by a twelve member Board of Directors. Nine of these members are chosen from the Councils of the nine incorporated cities or towns, the remaining three are chosen from the County Board of Supervisors. Officers are elected annually. The Authority holds public meetings on the second Monday (except holidays) of each month at the Sonoma County Permit and Resource Management Department hearing room in Santa Rosa.

The SCTA is staffed by an Executive Director, a planner and an administrative assistant. Staff provides the Board with agendas, staff reports and minutes of meetings. In addition, Staff is responsible for preparing the policy and public information documents of the SCTA.

Function

The SCTA performs several important functions in the local and regional transportation arenas. The three major responsibilities of the SCTA are:

- Programming Transportation Funds
- Coordinating Transportation Funds and Projects Among Jurisdictions (Local/Regional/ State/Federal)
- Preparing and Implementing the Countywide Transportation Plan

Programming Transportation Funds

The SCTA is responsible for programming most of the state and federal funds available to Sonoma County for roadway, transit and bicycle projects. This is discussed in greater detail in Chapter 5-Implementation and Funding. The SCTA ensures that these funds are granted and used properly in Sonoma County and assumes responsibility for assisting local jurisdictions in their applications for funds.

Coordinating Transportation Funds and Projects Among Jurisdictions (Local/ Regional/ State/Federal)

The SCTA coordinates the activities of local jurisdictions with the Metropolitan Transportation Commission (the regional transportation agency) and Caltrans. As coordinator, the SCTA provides a forum for discussions among local and regional jurisdictions on transportation, congestion management and project delivery

Preparing and Implementing the Countywide Transportation Plan

In June 1997, the SCTA completed an interjurisdictional study of transportation and land use entitled, *Sonoma/Marin Multimodal Transportation and Land Use Study*. The eighteen month long study provided information on the Highway 101/Northwestern Pacific Corridor and resulted in a list of projects aimed at reducing congestion within this corridor. The *Sonoma/Marin Study* was the basis for a proposed sales tax initiative that appeared on the November 1998 ballot and in a different form in the March 2000 ballot.

The *2001 Plan* is representative of the long range planning and programming function of the SCTA.

SCTA Committees

The SCTA also has the responsibility, through its committees, for reviewing and updating the Unmet Transit Needs Plan, reviewing and prioritizing TDA Article 3 Bicycle and Pedestrian projects, and reviewing and adopting the Coordinated TDA/STA Claim. The following standing Committees advise and give input into various issues for the SCTA:

- Technical Advisory Committee
- Citizens Advisory Committee
- Countywide Bicycle Advisory Committee
- Paratransit Coordinating Committee

The primary function of the Technical Advisory Committee (TAC) is to advise the SCTA on all technical matters. It is composed of Public Works Directors, Planning Directors and Transit Operators from each jurisdiction in Sonoma County. It also includes representatives from Caltrans, the Bay Area Air Quality Management District, the Metropolitan Transportation Commission, the North Coast Air Quality District, and the Golden Gate Bridge, Highway and Transportation District.

The Citizens Advisory Committee (CAC) is composed of fifteen members from specified interest groups and five members from the public-at-large The primary function of the CAC is to review projects, policy statements and decisions, funding programs, and any other policy matter acted on by the SCTA and to provide input and recommendations for the SCTA's decision making process. The CAC has also been active in promoting Countywide planning and has worked to develop the *2001 Plan* .

The Countywide Bicycle Advisory Committee (CBAC) was formed in July 1993 in response to MTC Resolution No. 875. The CBAC advises the SCTA on programming decisions for bicycle funds (TDA Article 3 funds) and aides in project coordination. The CBAC developed a Countywide Bicycle Plan that is available on line at http://www.sonoma-county.org/scta.

The Paratransit Coordinating Committee (PCC) is composed of one potential transit user over 60 years of age, one who is disabled, two representing local social service providers for seniors, two representing social service providers for disabled persons, one representative from each fixed route public transit operator within the county, and a local transportation agency. Each City or Town Council also appoints one representative. The PCC assists the SCTA in making funding decisions regarding paratransit and transit programs throughout the county. The PCC reviews the Unmet Transit Needs Plan and makes recommendations for allocating Section 5310 funds.

Chapter 2

Vision of the Future

Sonoma County Today and Tomorrow

Sonoma County has seen substantial growth over the past twenty years. More people in the County clearly leads to more cars on the road, and, in some areas, radically different traffic patterns.

It is expected that this growth will continue in the next 20 years, then level off as the population begins to age.

Where will most of this growth happen? If population patterns follow the current trend – the answer is everywhere. Cities in northern parts of the County, especially Cloverdale and Windsor, can expect substantial growth in the next 20 years, with Windsor's population projected to nearly double (to 40,500).

Sonoma County Population

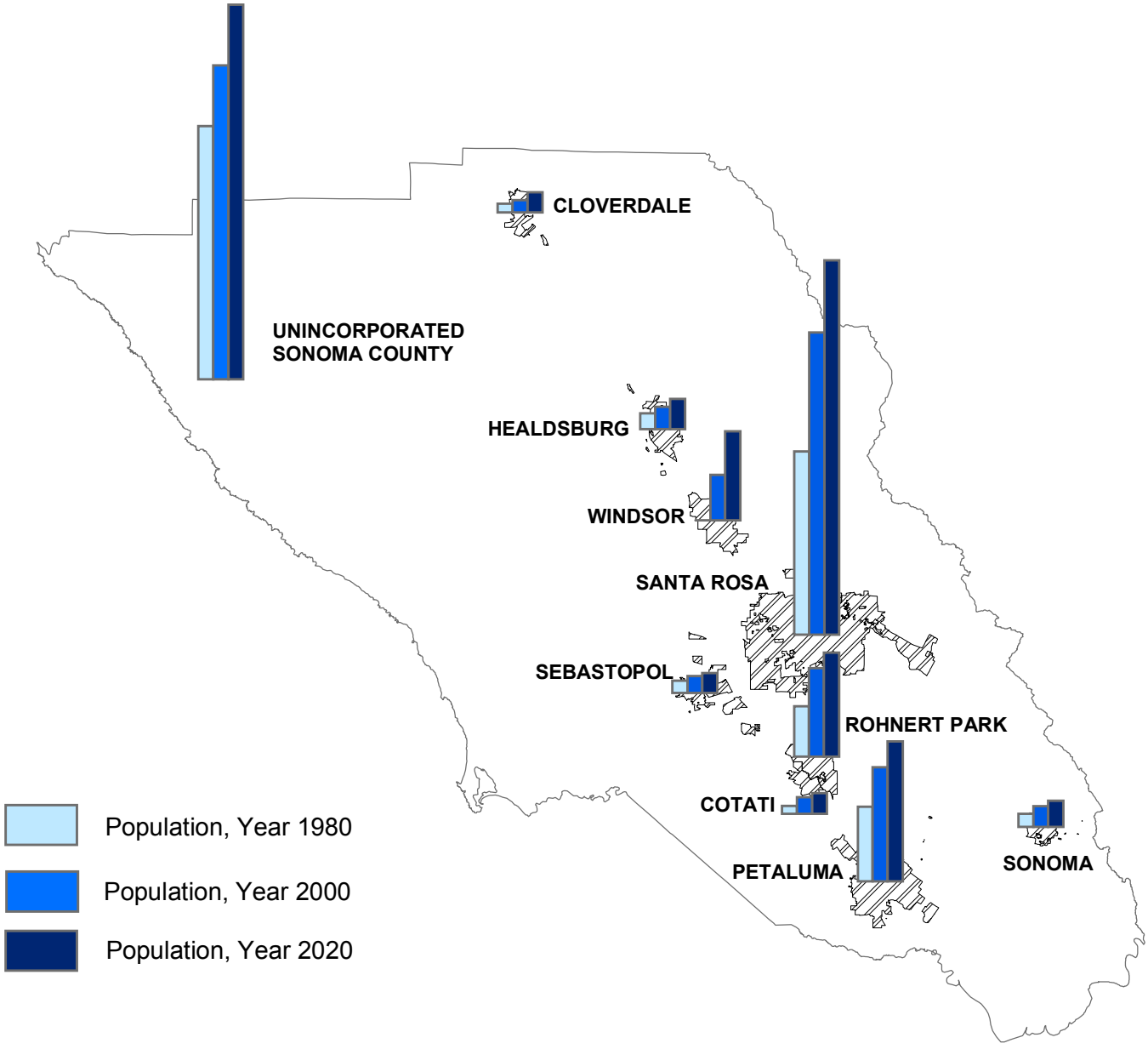
	1980	2000	growth	2020	growth
Cloverdale	3,989	5,600	40.4%	9,300	66.1%
Cotati	3,346	7,000	109.2%	8,600	22.9%
Healdsburg	7,217	10,000	38.6%	13,600	36.0%
Petaluma	33,834	51,800	53.1%	63,500	22.6%
Rohnert Park	22,965	40,300	75.5%	47,300	17.4%
Santa Rosa	83,320	137,400	64.9%	170,300	23.9%
Sebastopol	5,595	7,700	37.6%	9,000	16.9%
Sonoma	6,054	9,500	56.9%	11,800	24.2%
Windsor	n/a	20,700	n/a	40,500	95.7%
Unincorporated County	133,361	165,300	23.9%	197,300	19.4%
Sonoma Co. Totals	299,681	455,300	51.9%	571,200	25.5%

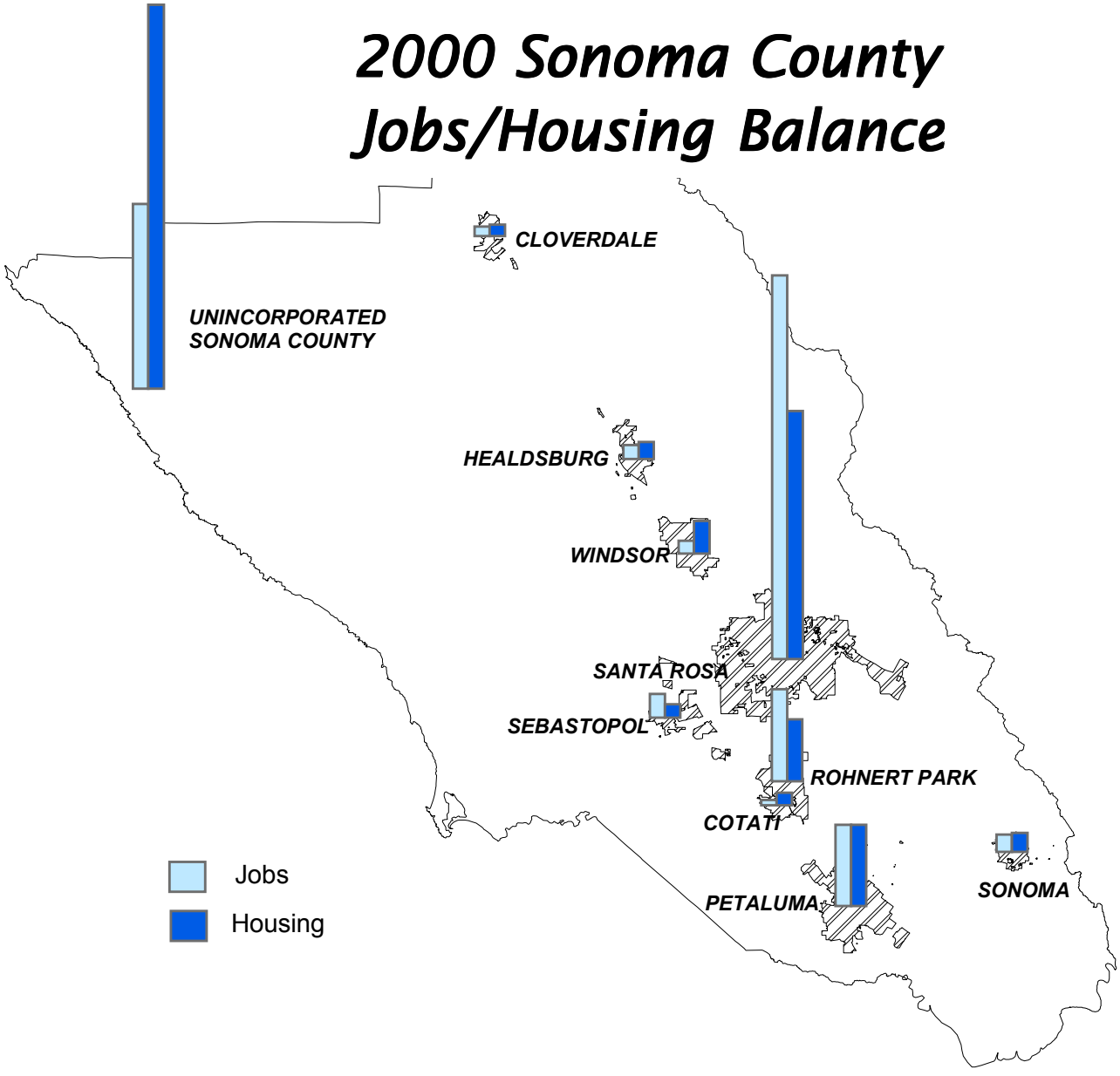
Sources: ABAG, California Department of Finance

The countywide policy of city-centered growth will keep the population of the unincorporated County at 19.4%, less than the County as a whole, forecasted at 25.5%.

Along with the increase in the number of people comes an increase in jobs, housing and need for services. The location of those jobs, houses and services will have a direct impact on the amount of traffic.

Population Growth, 1980-2020
Sonoma County




2000 Sonoma County
Jobs/Housing Balance
CLOVERDALE
UNINCORPORATED
SONOMA COUNTY
HEALDSBURG
WINDSOR
SANTA ROSA
SEBASTOPOL
ROHNERT PARK
COTATI
PETALUMA
SONOMA
Jobs
Housing

Jobs Housing Balance

The economy in Sonoma County has been healthy and remains strong. It is expected that new jobs will continue to be created in the County, an overall increase of 47%. The greatest percentage in growth is forecasted in the northern portions of the County, 134% in Windsor, 118% in Cloverdale, 115% in Healdsburg. The greatest actual increase in number of new jobs (43,340) will be in Santa Rosa. Housing is also expected to increase countywide, but only by 25%. The lag in housing availability compared to jobs contributes tremendously to the strain on the transportation system.

Sonoma County Jobs/Housing Balance

	Jobs Growth 1980 – 2020			Household growth 2000–2020		
	1980	2000	2020	1980	2000	2020
Cloverdale	1,825	2,440	5,120	2,137	2,310	3,630
Cotati	844	1,730	5,340	1,486	2,940	3,620
Healdsburg	3,381	4,180	8,910	3,355	4,100	5,510
Petaluma	10,432	21,140	32,510	12,484	19,490	23,340
Rohnert Park	5,280	24,800	37,720	8,813	15,440	20,650
Santa Rosa	55,926	109,980	153,720	40,433	63,820	79,880
Sebastopol	3,220	6,430	8,190	2,898	3,280	3,810
Sonoma	4,505	4,740	6,060	3,980	4,790	7,090
Windsor	892	1,900	4,450	2,156	7,290	14,370
Unincorporated County	17,051	26,190	37,090	36,733	48,060	53,930
Sonoma Co. Totals	**103,356**	**203,530**	**299,110**	**114,475**	**171,520**	**215,830**

Source: ABAG

Number of Registered Vehicles

The number of vehicles has increased even more than the number of people. Fifty years ago there was one vehicle (fee paid registered vehicle) for every two people. In 2000 there was nearly a car per person.

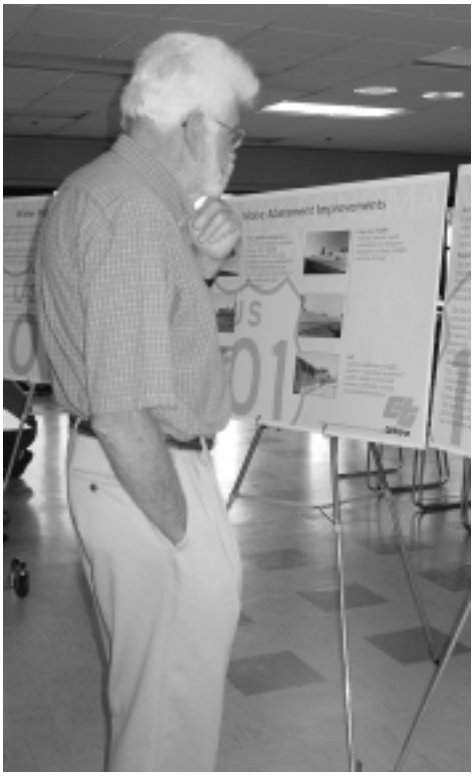
Funding for transportation improvements has not kept up with the obvious needs of the County. This has led to a situation with no clear single solution. The *2001 Plan* seeks to clarify our transportation vision and create opportunities to choose a variety of solutions. It will also help to identify our priorities so when funding does become available the SCTA can make strides toward a better

Fee paid registered vehicles in Sonoma County

Year	Registered Vehicles	Population	Vehicles per person
1950	52,007	103,405	0.50
1960	80,995	148,800	0.54
1970	138,018	204,885	0.67
1980	240,204	299,681	0.80
1990	332,841	388,222	0.86
2000	401,118	461,700	0.87

Source: California Department of Motor Vehicles

EXPECTATIONS OF A TRANSPORTATION SYSTEM



People in Sonoma County expect a functioning transportation system now and in the future.

This expectation has been expressed again and again from hundreds of people who have spoken at public meetings about transportation over the past 15 years. They want a system that is quick, cost-effective, environmentally sensitive and convenient.

The Citizens Advisory Committee (CAC) of the SCTA facilitated a series of Town Hall meetings in 1999 in order to provide a forum for discussion on transportation. Members of the SCTA and CAC invited the public to share their concerns and preferences for the future of transportation in Sonoma County. These meetings were hosted in Petaluma, Windsor, Santa Rosa, Sebastopol and Sonoma. Hundreds of people participated by attending the meetings or by submitting written comments.

It was clear from these meetings that a successful plan must include the following elements:

- Validation and expansion of our existing transportation system to include freeway improvements, a passenger rail system, an expanded bus system and new bike and pedestrian paths

- A seamless transportation system with linkages between bus systems, the future rail road, the freeway, local streets and roads and bike and pedestrian paths

- Maintenance of our quality of life

A COMMUNITY VISION

Based on citizen input, the SCTA developed a vision of transportation in Sonoma County by 2020. This document, *Getting Around Sonoma County in 2020…A Vision for Our Future* was created to guide our transportation choices over the next 20 years.

Community Vision

- A community that is linked together by a transportation network that not only includes the traditional roads, but also buses, bicycle and pedestrian paths, commuter rail service, privately owned vans and tourist and freight trains.
- A "seamless" transportation system, where people can use a variety of types of transportation for one trip without losing significant amounts of time or money.
- Transit and road information available and easily accessible 24-hours a day.
- The Highway 101/Northwestern Pacific Railroad corridor as a primary back-bone of this network, with full-service rail complementing a smoothly flowing highway.
- County roads and city streets that are safe, well maintained and have adequate room for pedestrians and bicyclists.
- A bus system that is coordinated throughout the county, with frequent service on popular routes.
- A bicycle and pedestrian path system that allows people to move through the county from East-to-West or from North-to-South on designated routes.
- A ferry-railroad connection that can get people and goods to other parts of the Bay Area and beyond.

Measuring Success

The following benchmarks will determine our level of success in achieving the Community Vision:

- √ No deterioration of current air quality
- √ Fewer miles traveled by single-occupancy vehicles
- √ More people using transit (as a percent of the population)
- √ Greater use of bicycles for commuting to work
- √ Improvement in flow of traffic on highways and local roads
- √ Reduced travel time between destinations on public transit
- √ Increase in the number of people sharing rides to work
- √ Increase in the number of people walking to work, shopping and doing errands
- √ Reduction in costs of moving supplies and finished products for local businesses
- √ Reduction in vehicle miles traveled per capita

Road Safety

Safety is a key component in any transportation system.

The following collision statistics are from the California Highway Patrol and include accidents on Highway 101.

The total number of collisions reported by the CHP on Sonoma County highways that resulted in property damage or bodily harm in 2000 was 7,786. Thirty-nine of those collisions resulted in a fatality. Alcohol was a factor in 336 collisions. Fortunately, all of these numbers are down from 1999.

There are many factors that affect road safety, including enforcement, vehicle safety, environmental factors, human error and road conditions. Improved pavement, curve straightening, signage, channelization, signalization and wider shoulders are just a few things that contribute to safety. Safety is a fundamental consideration in transportation policy making and funding.

Collisions in Sonoma County				
Total fatalities	56	47	49	39
Total injuries	2899	2999	2990	2992
Total property damage only	4356	4729	4582	4755
Alcohol involved fatalities	21	15	27	17
Alcohol involved injuries	360	374	373	319
Pedestrian fatalities	7	9	7	8
Pedestrian injuries	144	127	132	137
Bicyclist fatalities	1	2	2	0
Bicyclist injuries	221	221	226	210
Motorcyclist fatalities	10	3	4	5
Motorcyclists injuries	118	97	134	102
Source: Statewide Intergrated Traffice Records System - California Highway Patrol				

On Highway 101 collisions most frequently occurred on Tuesday, Friday, and Saturday; in the cities, drivers were most often involved in crashes on Wednesday, Thursday, and Friday. On both Hwy 101 and the state routes within city limits, there were high concentrations of collisions during commute times (6:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) However, in the cities, collisions tended to go up around 11:00 a.m. during the week, and remain at a higher lever until 7:00 p.m. People were involved in collisions most frequently on the unincorporated highways on Friday and Sunday afternoons.

Primary factors of fatal collisions

	Hwy 101	State Routes 12, 116, 121	
Order		Within Cities	Unincorporated County
1	Driving under the influence	Driving under the influence	Driving under the influence
2	Unsafe speed	Right of way violations	Right of way violations
3	Pedestrian under the influence	Unsafe speed	Pedestrian violations
4	Unsafe lane change	Improper turning	Other hazardous violations
5	Improper turning	Driving on the wrong side of the road	Improper turning

Source: Scenic and Safe Safety Task Force Final Report , Department California Highway Patrol Office of Special Projects, September 1999

Chapter 3

Transportation System

TRANSPORTATION POLICIES OVERVIEW

The Community Vision developed by the SCTA includes policy-related visions for the various modes of transportation. These policies served to guide the overall development of the *2001 Plan*. Modes of transportation discussed here are:

- Highways
- Roads
- Rail
- Bus/paratransit
- Bicycle/pedestrians
- Ferry

Also described are other transportation-related policies and innovative solutions. They are Land Use and Transportation, Telecommute Centers, Intelligent Transportation Systems, Welfare to Work, Smart Growth and the Regional Rideshare Program.

Highway 101

Seven of the nine cities in Sonoma County are located along Highway 101. Highway 101 connects the cities and also serves as "mainstreet" within them.

Highway 101 serves regional North-South through traffic, inter-county commuter traffic, and local traffic. This results in congestion, sometimes very heavy, during commute hours and often throughout the day. The extremely heavy Friday evening northbound traffic and Sunday afternoon southbound traffic attests to the regional use of 101 as a thoroughfare to and from distant endpoints.

Highway 101 is crucial for the following uses:

- Local movement
- Tourism
- Regional commute
- Movement of goods

It is unrealistic to expect traffic to travel at speeds of 65 mph during the peak commute periods. Virtually no one is advocating expanding the freeway to eight or ten lanes - which is what would be required to go back to the days of free-flowing traffic 24 hours a day. It is clear the tradeoff in terms of resources and aesthetics is too high.

Steps toward congestion management

Three basic steps are needed to help reduce congestion on Highway 101.

- Increase capacity by adding carpool lanes, widening the freeway from four lanes to six.
- Improve flow by adding auxiliary lanes, making interchange improvements and installing ramp metering where appropriate.
- Reduce the number of cars by improving non-structural alternatives such as telecommuting and staggered work schedules.

Our Community Vision for Highway 101 is a safe, convenient, and smoothly flowing freeway

- Less intense rush hour period where traffic can move at a steady pace.
- Traffic speeds moving at the limit during midday.
- Reduction in the "bottlenecks" at major interchanges and the Petaluma River Bridge.

Capacity

Highway 101 through most of the county was constructed between 1954-1962. A 1958 traffic count at the College Avenue interchange in Santa Rosa indicated that 15,000 cars a day were using the freeway at that segment. A 2000 Caltrans traffic count found that over 120,000 cars a day were traveling on the still four-lane freeway. Planners in the 1950's envisioned a freeway widened to six lanes in the 1970's to handle projected population growth in Sonoma County. Our population has continued to grow, but the freeway has not been widened.

Flow

Improving the flow is another way to reduce congestion. In crowded conditions a slow driver merging can cause traffic to bottleneck for miles. Methods that improve flow are aimed at providing a cushion for drivers during congested time periods.

There are many different methods to improve flow, including:

- Auxiliary lanes such as the ones on Highway 101 between Steele Lane and Bicentennial Avenue in Santa Rosa. Auxiliary lanes allow drivers to enter and exit the freeway without slowing traffic.
- Ramp metering to control how cars enter onto Highway 101. A fairly long onramp is needed for ramp metering, so traffic doesn't back- up onto surface streets
- Technology options such as electronic speed monitoring and changeable message signs help keep motorists aware and informed.
- Roundabouts to replace traffic signals at interchange on-ramps. Drivers using these traffic circles naturally monitor their speed and distance from other cars

Reduction of Cars

The third tool we can use to help ease the congestion on Highway 101 is to reduce the growth in number of cars on the freeway. One obvious way to do this is to provide reliable, accessible and cost-effective alternatives.

Another traditional method of reducing cars on the freeway includes ride-sharing, which seems most effective for people who live in the same community and work in a distant location. The current Highway 101 park and ride lots are always filled to capacity. Our Community Vision includes incentives (such as park and ride lots, bus connections, employee incentives, carpool lanes, etc.) to increase the number of people sharing rides to work.

We believe that people's access and use of technology will have an even more substantial impact than ride-sharing. Our Community Vision of Sonoma County in twenty years includes an explosion in the number of people working, shopping and conducting other transactions electronically. Cutting-edge employers, such as Agilent Technologies and Fair Isaac, actively encourage

telecommuting. If the current growth in knowledge-based jobs continues, we envision many more employees using home-based work stations.

We also envision many more people using e-commerce to conduct financial transactions and make purchases. Highway 101 has been coined "Sonoma County's Main Street" for a reason — 76% of use is by people who are shopping or running errands. Many of these people will increasingly choose to use the information highway.

Our Community Vision for the local road network includes the following:

- Ongoing, aggressive maintenance of existing streets and roads, including resurfacing and pot hole repair.
- Safety improvements on those streets and roads that are highly traveled.
- Re-engineering of those county roads that flood during the winter.
- Traffic flow improvements on highly-traveled arterials.
- Accommodations for other modes of travel, as needed, including sidewalks, bike paths and bus stops.

Streets and Roads

Sonoma County has over 2,300 lane miles of city streets and county roads.

In addition, Sonoma County has 250 miles of state roads, including Highways 12, 121 and 116. Sonoma County is geographically large. Although most of the population is clustered within the incorporated cities and along the Highway 101 Corridor, a large percentage of the population lives scattered throughout the County. Many of these people live in areas zoned rural and commute into one of the cities or onto Highway 101. This vast system of roads in the cities and outside of the cities carries a tremendous amount of regular traffic. In addition, congestion on Highway 101 has led to overflow onto local arterials. Routes that used to carry primarily local traffic, like Petaluma Hill Road, Adobe Road, Stony Point and Old Redwood Highway now have freeway type commute traffic. Roads that bypass urban traffic, such as Fountain Grove Parkway, Crane Canyon-Grange around Santa Rosa, and the succession of rural roads that form a beltway around southeast Sebastopol, are serious transportation problems that may become regional problems.

Value of the Streets and Roads Infrastructure in 2001

Jurisdiction	Reconstruct Value
Cloverdale	$23,464,000
Cotati	$17,617,000
Healdsburg	$43,042,000
Petaluma	$146,000,000
Rohnert Park	$94,658,000
Santa Rosa	$469,141,000
Sebastopol	$23,085,000
Sonoma	$31,176,000
Windsor	$72,988,000
County	$1,360,000,000
Total	$2,281,171,000

Source: data from each jurisdiction

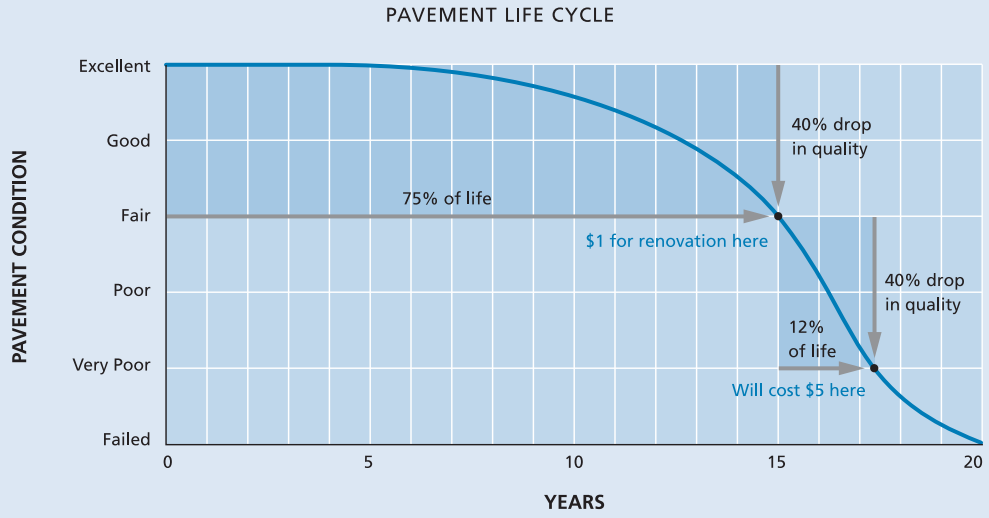
Improving our streets, roads and highways

There are several ways to improve traffic flow on the local roads. They are:

- Maintain our existing system to better conditions.
- Improve flow by adding capacity, improve channelization and add signalization.
- Build new roads to make important connections or relieve overburdened roads.

System maintenance

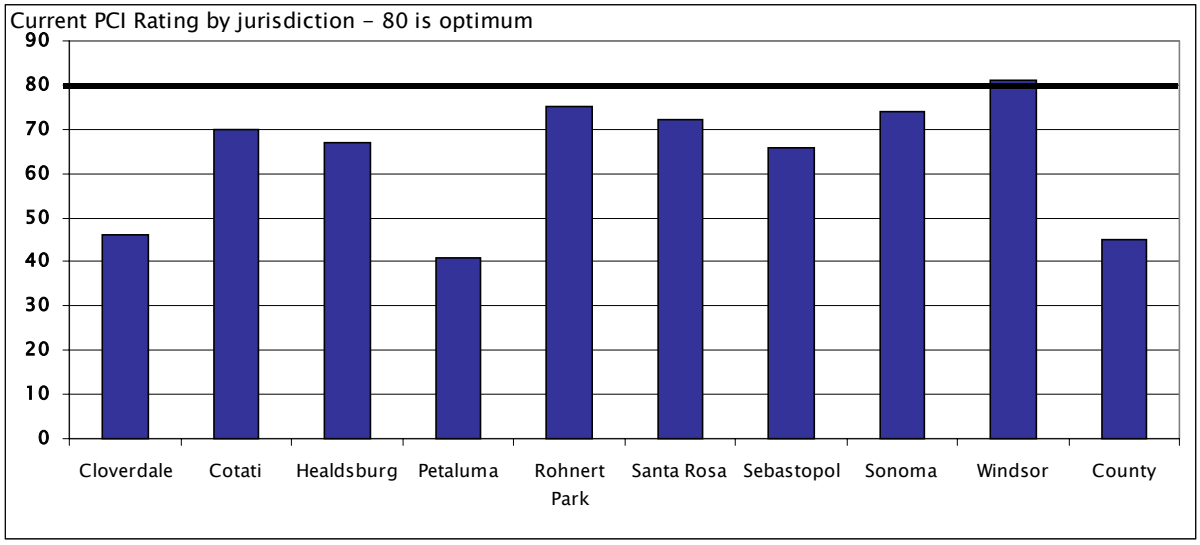
No one likes potholes, but it is a fact of life that many jurisdictions respond to funding shortages by deferring preventative maintenance. This causes roadway systems to deteriorate at high rates. As cities and counties concentrate their limited resources on the most obvious needs, such as filling the worst potholes or reconstructing streets with the worst pavement conditions, the critical area of preventive maintenance is neglected. Research has shown that a typical pavement segment deteriorates 40 percent in quality in the first 75 percent of its life, and then deteriorates another 40 percent in the next 12 percent of its life.



Time varies depending on traffic, climate, pavement design, etc.

Source: MTC

The following chart shows the extent of the need in Sonoma County. The Pavement Condition Index (PCI) is a rating of the quality of pavement. Overall, it is more cost efficient to maintain a road at a higher PCI, with the optimum PCI being 80. It is clear that the roads in Sonoma County are below optimum and require a high priority.



Improve flow

Improving flow helps to relieve congestion with a minimal impact and investment. Improved shoulders and intersections help to keep traffic moving smoothly through changing conditions. Bike lanes and walkways keep cyclists and pedestrians out of traffic.

There are many different methods to improve flow, including;

- •Improved shoulders
- •Signal timing
- •Improved connection points
- •Intersection controls
- •Walkways
- •Roundabouts
- •Bike lanes
- •Increase capacity
- •Intelligent Transportation Systems

New Roads

We can't build out of our traffic problems, but an environmentally sound, public involved process can help develop new routes that may minimize unwanted traffic through neighborhoods.

New construction is not always a high priority. It is an option that is considered only when the rural character of our roads and the safety and aesthetics of our urban neighborhoods can be preserved or improved.

Rail

We are extremely lucky in Sonoma County to have a railroad right-of-way that is owned by the public. It is our responsibility to ensure that this resource is used in a way that is economical, efficient and meets the greatest needs. We see commute, freight and tourism services creating a symbiotic relationship that will ensure a solid economic base for the system, as well as meeting a number of different needs.

Sonoma/Marin Area Rail Transit Commission

In the fall of 1998, the Counties of Sonoma and Marin formed the Sonoma/Marin Area Rail Transit Commission (SMART) to develop an implementation plan for a start-up passenger rail service in the two counties. The plan was adopted in May 2000.

Sonoma County appoints two Supervisors, two City Council Members and one at large member to the Commission. Marin County has similar representation. The Sonoma County Transportation Authority (SCTA) and the Marin County Congestion Management Agency provide staffing oversight for SMART.

Over an 18-month period, the Commission, administrative staff and consultants explored numerous options for initiating passenger rail service. Options included variations on routes, schedules, types of rolling stock (cars and locomotives), funding alternatives, and potential environmental impact mitigation. Their work resulted in a recommendation for a preferred alternative for the initial service, consisting of the following elements:

- The route will run 68 miles from Cloverdale in the north to downtown San Rafael in the south. There will be 11 stations along the route.
- The service will begin with 45-minute peak period headways (the time intervals between trains). Headways would shorten to 30 minutes after seven years of operation.
- Though primarily a commuter service, it will offer limited mid-day trains as well.
- The service will employ one of three rolling stock types. This could either

be traditional diesel electric locomotives hauling coaches (locomotive-hauled equipment), self-propelled diesel cars known as Diesel Multiple Units (DMUs), or rebuilt self-propelled Rail Diesel Cars (RDC) or "Budd cars".

The total cost estimated for line improvements is approximately $100 million for Sonoma County. The cost of rolling stock would be added in after that, as would the costs of operation. The service would be funded through a combination of sources including: contributions from a future sales tax, Proposition 116 rail bond funds designated for the service, Federal and State earmarks, and fare revenue.

Our Community Vision for rail is a system that does the following:

- Provides commuter rail service to people living and working in Sonoma County and Marin County.
- Provides freight service — taking trucks off the highway — as one part of a link that extends from Eureka to the Central Valley.
- Provides tourism service on historical trains that run within the county mid-day during the week and all weekend.

In 2000, $37 million was earmarked for SMART in the Governor's Traffic Congestion Relief Program. This makes initial environmental and engineering study possible.

In the meantime, many cities are recognizing the value of their historic rail stations or sites. Santa Rosa has renovated their station, which is now used as a visitor center. Cloverdale recently opened a beautiful transit center, located on the rail line. Cotati and Windsor have new facilities in the works.

Tourist Trains

We envision historical trains operating via private vendors, who see the opportunity to take tourists off the road and give them a unique wine country experience. Passenger excursion trains will also provide a way for local residents to enjoy recreational opportunities in the county by scheduling trains that stop at recreational and retail centers.

Freight Service

Development of a viable freight service isn't just a county issue. In order to get long-haul traffic on the rail line, we must look at a larger area. Currently, the North Coast Rail Authority, in cooperation with the Northwestern Pacific Railroad Authority is implementing a program to rehabilitate the right of way to meet minimum standards for freight and passenger excursion service from Sonoma to Eureka.

Increasing the freight traffic on the rail line will result in fewer trucks on the highway. One analysis estimates that 3,000 trucks a week could be taken off of Highway 101 if we had a fully operational freight system. *Source: North Coast Rail Authority 5 Year Plan, July 1999*

Bus Service

Since the late 1970's, public transportation services in Sonoma County have been expanded in an effort to provide a viable alternative to the private automobile. In recent years, however, funding constraints have resulted in fewer expansions of fixed-route service while attention shifted to expansion of paratransit services in order to meet requirements of the Americans with Disabilities Act (ADA). Each of the County's transit systems achieved compliance with the ADA prior to the federally mandated January 1997 deadline. While ADA paratransit services have increased in recent years, the most prevalent type of public transportation service provided in the county remains fixed-route transit.

The Transit TAC, a subcommittee of the Technical Advisory Committee reviews and discusses the Coordinated Claim each year. The Claim shows the funding and operational agreements between the transit operators in the county. The Transit TAC also addresses countywide transit coordination in scheduling and public outreach.

	Number of Routes	Number of Buses	Adult fare	Ave monthly passengers
Santa Rosa CityBus	17	26	$1	194,150
Sonoma County Transit	22	54	$1.15	115,205
Petaluma Transit	3	8	$.80	17,300
Healdsburg	1	2	$1	1,058
Cloverdale	1 + on demand	1	$.75	600
Golden Gate Transit (Sonoma County)	8	60	$2.20–$5.30	115,665
Source: Transit operators				

Fixed-route Service

Fixed-route transit, as its name implies, refers to transit service that operates on a specified route, without deviations, according to a fixed daily schedule. Local fixed-route services operate within the cities of Cloverdale, Healdsburg, Petaluma, Santa Rosa (and unincorporated Roseland), Rohnert Park, Cotati, Sebastopol, Sonoma, and Windsor. Fixed-route

Our Community Vision for a bus transit system does the following:

- Is coordinated, with passengers able to transfer easily and conveniently.
- Serves the needs of elderly people, non-drivers, people with disabilities, commuters and students.
- Links with passenger rail service.
- Takes people throughout the county with minimum inconvenience.
- Uses nontraditional vehicles (vans, trolleys), when appropriate.
- Allows connections between bike lanes/paths and bus service.
- Provides bus services that are safe and inviting.

intercity service is provided by Sonoma County Transit and service to Marin,Oakland and San Francisco is provided by Golden Gate Transit.

Transit System Information

Ridership in Sonoma County has increased over the years at a modest rate. In fiscal year 1999 Santa Rosa CityBus provided nearly 2 million rides. Sonoma County Transit provided 1.48 million rides and 183,000 rides were made on Petaluma Transit. Most operators run regular daytime hours, with some weekend service.

Coordination

Santa Rosa CityBus and Sonoma County Transit allow free transfers between each system. In addition, a collaborative fare program called the "SuperPass" gives access to all of Sonoma County's transit systems - Sonoma County Transit, Santa Rosa CityBus, Golden Gate Transit, Petaluma Transit, Healdsburg Transit, and Cloverdale Transit. The SuperPass can be used on any of these transit systems in any combination in a month.

Paratransit Service

Paratransit is curb to curb public transportation available to the disabled population that meets eligibility requirements of the American with Disabilities Act (ADA).

The Sonoma County population is growing older and is projected to continue that trend. By the year 2020 the number of people between the ages of 65 and 79 is estimated to more than double the 2000 population of that age group.

Sonoma County Transit provided 24,946 paratransit trips and the City of Santa Rosa provided 23,853 paratransit trips in 2000. The demand for paratransit services is already high, yet we must prepare for a much greater need in the future.

The Volunteer Wheels Program is under contract with both the County of Sonoma and the City of Santa Rosa to provide paratransit services. Since the passage in 1990 of the Americans with Disabilities Act (ADA) contracts were expanded to offer paratransit for persons who meet certification requirements of ADA.

Specialized Services

The descriptions of specialized services in this section focus on programs funded with TDA Article 8 funds.

Mendocino Transit Authority (MTA) provides service daily from the Sonoma Coast into Santa Rosa under contract with Sonoma County Transit. During FY 1999, over 10,000 one-way rides were provided. Because MTA operates on a fixed-route with a fixed schedule, it is not actually a paratransit operation, but is included in this section for reference as it is funded with TDA Article 8 funds.

Petaluma People Services Center (PPSC) provides local, curb-to-curb paratransit service to those who are unable to use regular fixed-route transit services and who meet ADA requirements. PPSC operates under contract to the city of Petaluma and is the ADA paratransit provider for Petaluma Transit.

Volunteer Wheels (VW) provides van and automobile transportation under contract to both the City of Santa Rosa and Sonoma County. VW operates demand-responsive service within the cities of Santa Rosa, Rohnert Park-Cotati, Sebastopol, Guerneville, Windsor and Sonoma. It also operates Sonoma County Paratransit's intercity services between all Sonoma County cities and towns except Bodega Bay. Altogether, VW operations provide approximately 3,800 passenger trips per month.

Cloverdale Transit and Healdsburg Transit also offer demand-responsive service to seniors and ADA eligible riders within their local service areas.

Paratransit Coordinating Committee (PCC)

The Paratransit Coordinating Committee was originally established in December 1978 in response to MTC's Resolution No. 468, which called for the establishment of a "Paratransit Coordinating Committee" in each of the nine Bay Area counties. The Sonoma County PCC assumed its current role in 1982 with the establishment of the countywide Transportation Planning Council (now Sonoma County Transportation Authority). Since its inception, the responsibility of the PCC has been to advise a wide range of public agencies (including SCTA, the Board of Supervisors, MTC, and Caltrans) on the expenditure of funds and the availability of transportation services for special need population groups. The responsibilities of the PCC include:

- Annual participation in the identification of transit needs in the jurisdiction, including unmet transit needs that may exist within the jurisdiction.
- Serving as the social service transportation advisory council
- Advising the SCTA on any major transit issues, including the coordination and consolidation of specialized transportation services.

Membership on the PCC includes 9 members appointed by the cities, 2 appointed by the County, and at-large members appointed by the SCTA upon the recommendation of the PCC. State law spells out certain membership requirements intended to ensure senior, disabled, and low-income communities are represented. Ex-officio representatives of transit agencies serving Sonoma County also attend.

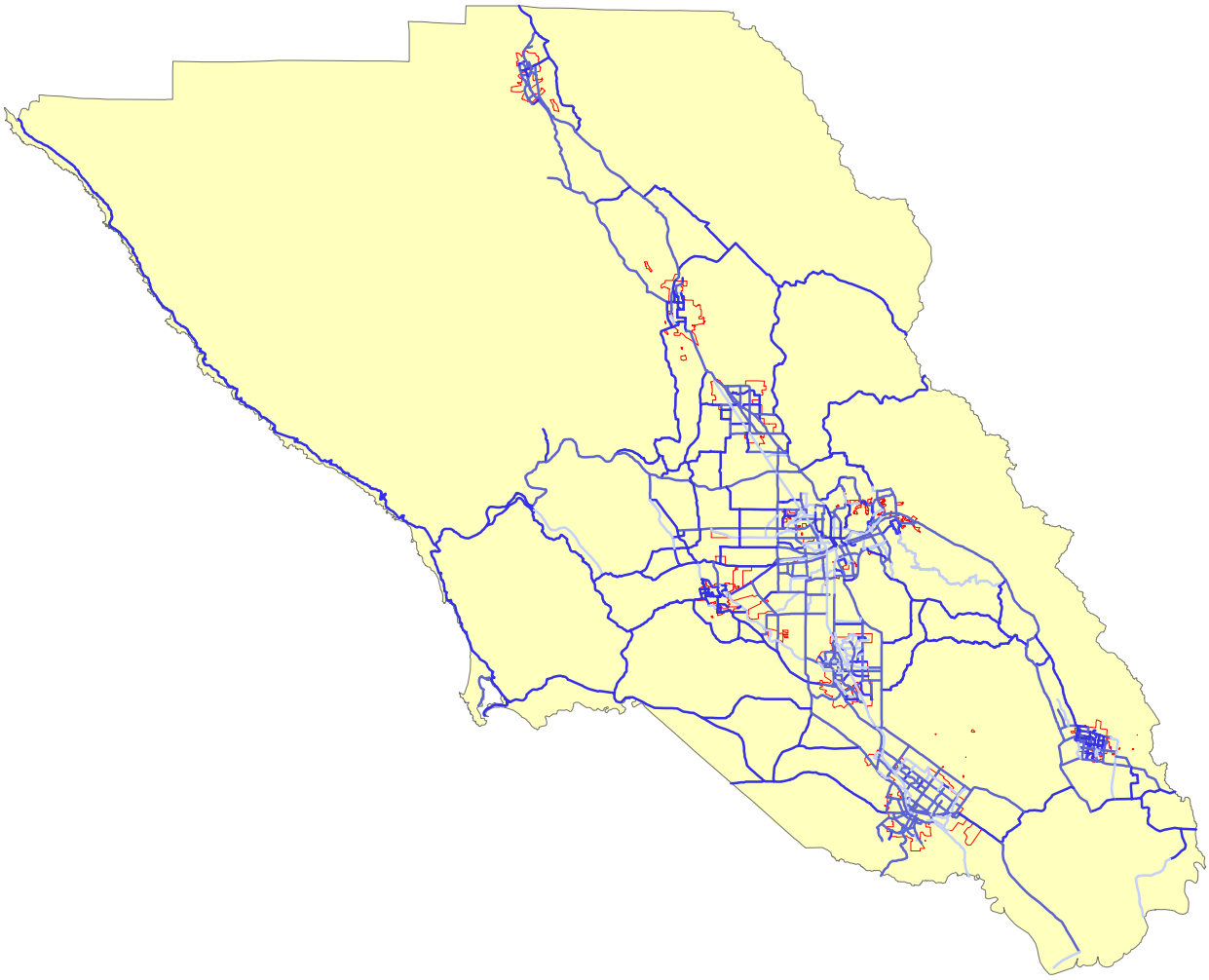
Americans with Disabilities Act (ADA)

On July 26, 1990, President Bush signed into law the Americans with Disabilities Act (ADA). This civil rights legislation mandates equal opportunity in employment, transportation, telecommunication, and places of public accommodation for people with disabilities.

On September 6, 1991, the U.S. Department of Transportation (USDOT) published final regulations implementing certain provisions of the ADA. Included in these regulations was a requirement that public entities operating fixed-route transportation service for the general public also provide complementary paratransit service to persons unable to use the fixed-route system. Complementary paratransit service must be comparable to the public transit operator's fixed-route service regarding the following service criteria: comparable response time, similar fares, same geographic area of service, no restriction of trip purpose, equal availability of information and no constraints on capacity.

ADA regulations required public transit operators to prepare an annual ADA Plan to document their compliance status during the five-year implementation period of 1992 through 1997. In accordance with ADA requirements, Golden Gate Transit, Petaluma Transit, Santa Rosa Transit and Sonoma County Transit increased their ADA paratransit services to achieve "full compliance" status. Each operator produces a Short Range Transit Plan to address continuing efforts to maintain ADA compliance.

Sonoma County Bicycle Plan



Bicycle Path Classification

Cities

CLASS

I

II

III

Bicycle and Pedestrian Facilities

People live in and visit Sonoma County for its natural beauty. Many who live here take advantage of the beauty by hiking, walking and bicycling through our community. Others bike or walk because it is affordable and healthy.

Countywide Bicycle Advisory Committee

The Countywide Bicycle Advisory Committee (CBAC) advises the SCTA on issues related to the Transportation Development Act, Article 3 Pedestrian/Bicycle funds (TDA Article 3). The CBAC also has developed a set of goals and objectives for other appropriate functions of the Committee. These include bicycle and pedestrian educational and planning activities and development of funding strategies beyond TDA Article 3 funding. In 1998 the CBAC produced the Sonoma County Bicycle Plan, a countywide effort.

The CBAC also provides a venue to share information and coordinate projects, education activities and funding opportunities.

Formation of the CBAC

In December 1991 the Metropolitan Transportation Commission (MTC) adopted Resolution No. 875, establishing new procedures to ensure the participation of bicyclists in the development of projects funded with TDA Article 3 funds. The resolution required the formation of Bicycle Advisory Committees in all jurisdictions with 10,000 or more people. Prior to passage of MTC Resolution No. 875, Sonoma County had successfully utilized a "scorecard" system for programming TDA Article 3 funds. The scorecard ensured each jurisdiction its population-based share of the funds, making the process as equitable as possible. This system has been retained in Sonoma County. To ensure that even small jurisdictions without local BAC's had bicyclists participating in the

Our Community Vision for a comprehensive bicycle/pedestrian system

- A fully implemented Countywide Bike Plan, with trails or designated paths that link all cities and are connected to bicycle paths within cities.
- A safe and comfortable system for those on bikes or on foot.
- Enhanced opportunities for tourism.
- A linkage from bike paths to rail stations and bus stops; and a path that follows the Northwestern Pacific rail-right-of-way, creating a north-south linkage.

process the SCTA created the CBAC review process.

Functions of the CBAC

The primary activity of the CBAC is to review applications for TDA Article 3 projects. TDA Article 3 funds are received annually on a population based formula by each jurisdiction in the county. Bicycle and pedestrian projects that will use TDA Article 3 funds are required to be reviewed by each jurisdiction's local BAC. After the project has been reviewed, it must then be approved by the CBAC. In jurisdictions too small to have a local BAC, the CBAC acts as the local BAC.

The CBAC reviews and prioritizes projects using a set of criteria formulated by MTC. Jurisdictions must propose projects within their TDA Article 3 funding limit. A six-year projection is also prepared so that jurisdictions can determine when they will have accumulated enough funding for proposed projects. Jurisdictions are allowed to borrow against projected allocations for the two upcoming years. Each year the total of the proposed projects cannot exceed the total countywide allocation TDA Article 3 funds.

The CBAC forwards its recommendations to the SCTA so that they may make informed decisions and recommendations on these funds to MTC who makes the actual allocation of funds to each project.

The CBAC also provides a venue to share information and coordinate projects, education activities and funding opportunities.

Ferry Transportation

Utilizing existing waterways will allow Sonoma County commuters, recreational users and travelers to get to their destination quickly and efficiently. Whether it's to a sporting event, the museum or the airport, ferries will become an excellent alternative for people. As part of our seamless transportation system, it is critical that ferry service be linked to rail, bus and multi-use paths, and provide adequate parking.

Ferry service linked to train service will also provide tourism opportunities for our local economy. People visiting - or those just wanting a wine country weekend getaway - will be able to incorporate water transit as part of their tourist experience.

The State Legislature has created the Bay Area Water Transit Authority to plan future ferry expansion and the North Bay has been included in those efforts.

Land Use and Transportation

Transportation and land use are linked in many ways. The location of jobs vis-à-vis housing, commute patterns, location of retail and other services are all considerations in the planning for a transportation infrastructure. This plan must consider local land use decisions and complement the general plans within the county.

The SCTA is committed to transportation solutions that meet a variety of needs and support a high quality of life. The SCTA does not, however, have any authority over land use decisions.

Key measurements of the transportation/land-use link include:

- The distance people have to travel to get to work.
- The percent of people who work within the region.

Sonoma County does well by these measurements which results in reduced vehicle miles traveled. People in Sonoma County travel approximately 12 miles to get to work everyday and 82% of employed county residents work in Sonoma County. We have the lowest in-commute and out-commute ratio of any county in the Bay Area. *(Source: ABAG)*

Our Community Vision for land use as it relates to transportation

- An improved jobs-housing balance that reduces the distance workers commute. This can be done through the active encouragement of projects that incorporate the principles of pedestrian or transit-oriented development. Any new development should be encouraged to provide housing within walkable distances from daycare, shopping, school, work and community events.
- Local General Plans that will focus on city-centered growth.
- A transportation system that is compatible with mixed use developments.
- A transportation system that does minimal harm to air and water quality.

Our Community Vision focuses on future opportunities - not past mistakes. We recognize that land-use policies can influence transportation patterns. We also recognize that simply changing our transportation policies cannot solve land use problems. There are other factors — primarily housing availability and affordability— that also influence land use decisions. Therefore, our Vision focuses on those land-use issues that are relevant to transportation.

Preservation

Sonoma County has made great strides in protecting our community's natural resources.

In 1990, voters approved a 1/4 cent sales tax for the purchase of agricultural and open-space easements. The Agricultural Preservation and Open Space District has annual revenues of approximately $13 million, which is for agricultural land preservation and open space acquisition in accordance with the Expenditure Plan approved by the voters.

Additionally, eight of nine Sonoma County cities have voter-approved urban growth boundaries that restrict development and reduce urban sprawl. The County also has an ordinance that limits development of property between cities with urban growth boundaries.

In 1998, voters approved Measure D, ensuring that a greenbelt will be preserved between Marin and Sonoma.

Innovative Transportation Solutions

Telecommute Centers

Fair Isaac, a Marin-based creator of financial decision making tools, employs 298 people in Sonoma County. Recognizing the loss in productivity that occurs when employees travel during peak commute periods, Fair Isaac has developed a Petaluma telecommute center. Employees who live in Sonoma County can stop by the center in the morning, work for a few hours or all day, and drive to headquarters when traffic has cleared up. Currently the center is utilized by 40 employees per week.

Computers at the center are linked to company headquarters so employees can access their own files easily. The center is equipped with office supplies and a copy machine. Only a handful of companies have the resources to create stand-alone centers. However, we envision a growth in these types of facilities in Sonoma, Sebastopol and perhaps Cloverdale or Healdsburg.

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) is defined in TEA-21 as "electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system". An effective ITS network will help monitor the flow of traffic and make it smoother. An example of an ITS improvement is well-timed traffic signals that keep cars moving without constant stop and go.

Welfare to Work

As of December 12, 1999, approximately 27,400 low-income persons were receiving assistance in Sonoma County. This number includes people receiving assistance through Medi-Cal, food stamps, General Assistance, foster care and Temporary Assistance for Needy Families (TANF). Of this number, 5,505 persons are in the SonomaWORKS programs. It is estimated that the majority of new jobs created in the next ten years will be entry-level, earning low wages. Today an adult with two children (the typical TANF recipient) needs nearly $14 an hour to achieve self-sufficiency in Sonoma County and earns only $7.68 an hour. This disparity creates a difficult situation exacerbated by the high cost of reliable transportation.

The SCTA participated in a nine-month locally-oriented inter-agency planning process to study the transportation barriers faced by SonomaWORKS participants and develop strategies for addressing these barriers.

Source: MTC Sonoma County Welfare to Work Transportation Planning Project Final Report November 2000

Smart Growth Initiative

The SCTA is participating in the ongoing efforts of the Smart Growth Initiative. In the fall of 2000, MTC joined forces with four other regional agencies — the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), the Bay Conservation and Development Commission (BCDC) and the Regional Water Quality Control Board (RWQCB) — as well as the Bay Area Alliance for Sustainable Development to investigate smart growth and sustainable development in the Bay Area. One goal is to develop consensus on a set of "best practices" and financial incentives to spur similar smart growth efforts. The agencies also intend to work with local governments to identify environmentally important areas that should be preserved or enhanced, as well as to define appropriate land-use patterns for those areas deemed suitable for development.

Regional Rideshare Program

In association with MTC, the SCTA promotes and facilitates carpooling as a commute alternative to reduce congestion on Sonoma County Road roads. With services provided under contract by RIDES for Bay Area Commuters (RIDES) an automated ridematching system assists commuters in forming carpools and vanpools. Commuters and employers learn about the services through worksite demonstrations and special promotional events.

Chapter 4

Transportation Needs

There are several levels of transportation planning. Each jurisdiction documents their transportation plan within their General Plan and in their Capital Investment Plan (CIP). The Countywide Transportation Plan is consistent with local planning. The Regional Transportation Plan (for the entire Bay Area) incorporates the projects the Countywide Transportation Plan at the request of the SCTA. All of these efforts are regularly updated with input from the public and reflect the changing needs of the community.

The Regional Transportation Plan (RTP)

State and federal law requires MTC to prepare and update a Regional Transportation Plan (RTP). The RTP documents long-range direction for operating, maintaining and improving the transportation system for the Bay Area. It must outline a plan for improvements to the regional transportation system that can be implemented within expected financial constraints over the next 25 years.

The 2001 RTP update is underway and expected to be completed by the end of 2001. The Countywide Transportation Plan should be consistent with the portion of the RTP that applies to Sonoma County, just as the RTP must be consistent with the State Transportation Plan and applicable air quality plans. To obtain funding through many State and federal sources projects must be included in the RTP.

The Blueprint

In addition to the 25 year constrained plan MTC has developed the *2000 Bay Area Transportation Blueprint for the 21st Century*. This plan helped counties develop a list of projects throughout the region that cannot be funded under the 25 year forecasted revenues but could be advanced if new revenues became available. Such new revenues sources include new sales tax measures, increased state funding, a regional gas tax, and new bridge tolls.

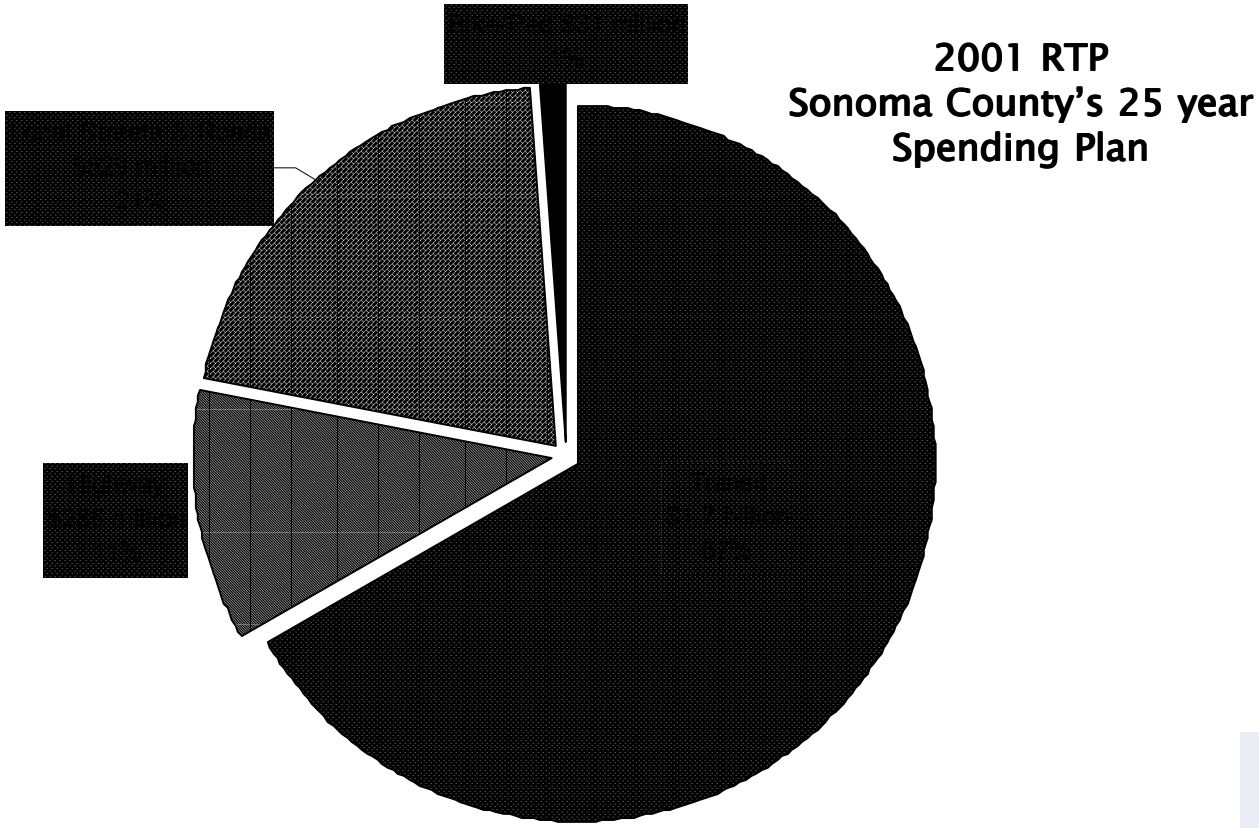
For more information on the RTP and the Blueprint see MTC's web site at www.mtc.ca.gov.

Sonoma County 2001 RTP and Blueprint Lists

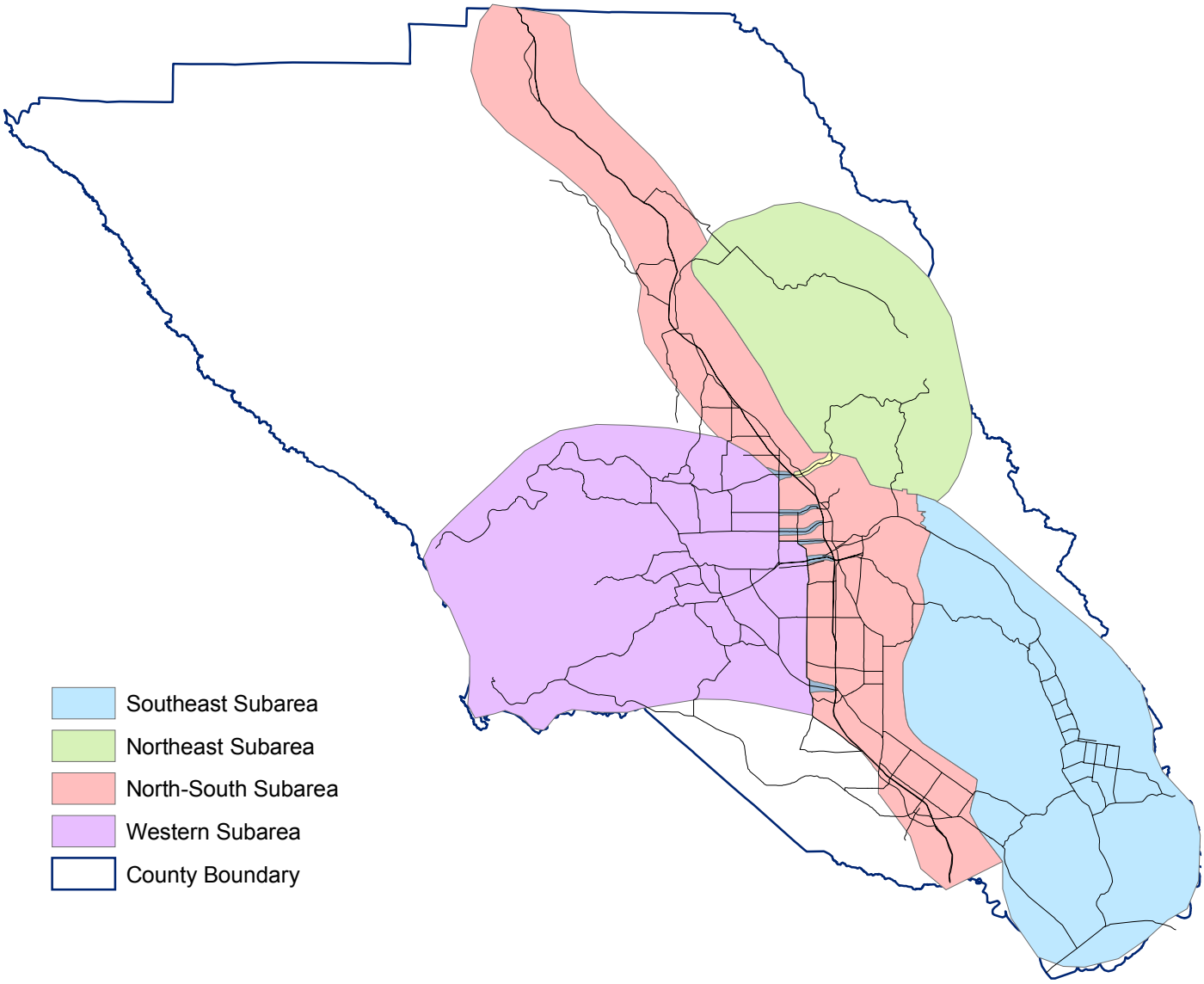
Over the 25-year life of the RTP, it is anticipated Sonoma County will receive nearly $2.5 billion in funding for transportation. This revenue is divided into two parts: Committed Funds and Track One Funds. Committed Funds include sources of revenue dedicated only to specific transportation programs such as transit and bike paths. These programs are detailed in Chapter 5. Track One Funds are those sources of revenue that have fewer constraints and can thus be used for a variety of transportation projects. Some Track One Funds are committed to regional priorities while others are left up to the discretion of the SCTA.

In the 2001 RTP Sonoma County will plan for nearly $2 billion in Committed Funds and over $500 million in Track One Funds. Additionally, Sonoma County will plan for $1.2 billion in Blueprint revenues assuming new funds in the future.

The project lists developed for the 2001 RTP and the Blueprint are based on the list of projects included later in this chapter. Those lists take a multi-modal approach and include all project types – from maintaining the existing system to expanding transit to widening Highway 101 to building new bike and pedestrian paths.



Sonoma County Subareas



COUNTYWIDE TRANSPORTATION PLAN PROJECT LIST

As it applies to Sonoma County the RTP covers transportation projects in broad strokes. The Countywide Transportation Plan Project List has more specific projects and is not fiscally constrained.

The Subarea Approach

For the purpose of the *2001 Plan*, Sonoma County is divided into one subregional corridor (the Golden Gate Corridor) and four County subareas. The subareas have distinct travel characteristics caused by their traffic patterns and surrounding land uses.

The transportation projects within the subareas are multimodal.

On the Subarea Map the entire county is shown with the subareas highlighted. Subsequent maps show the North/South, Northeast, Southeast, West subareas and the Golden Gate Corridor . Corridors that are important connectors are labeled primary corridors. This categorization does not automatically slate them for future improvements, though it is intended to create a better understanding of the current system.

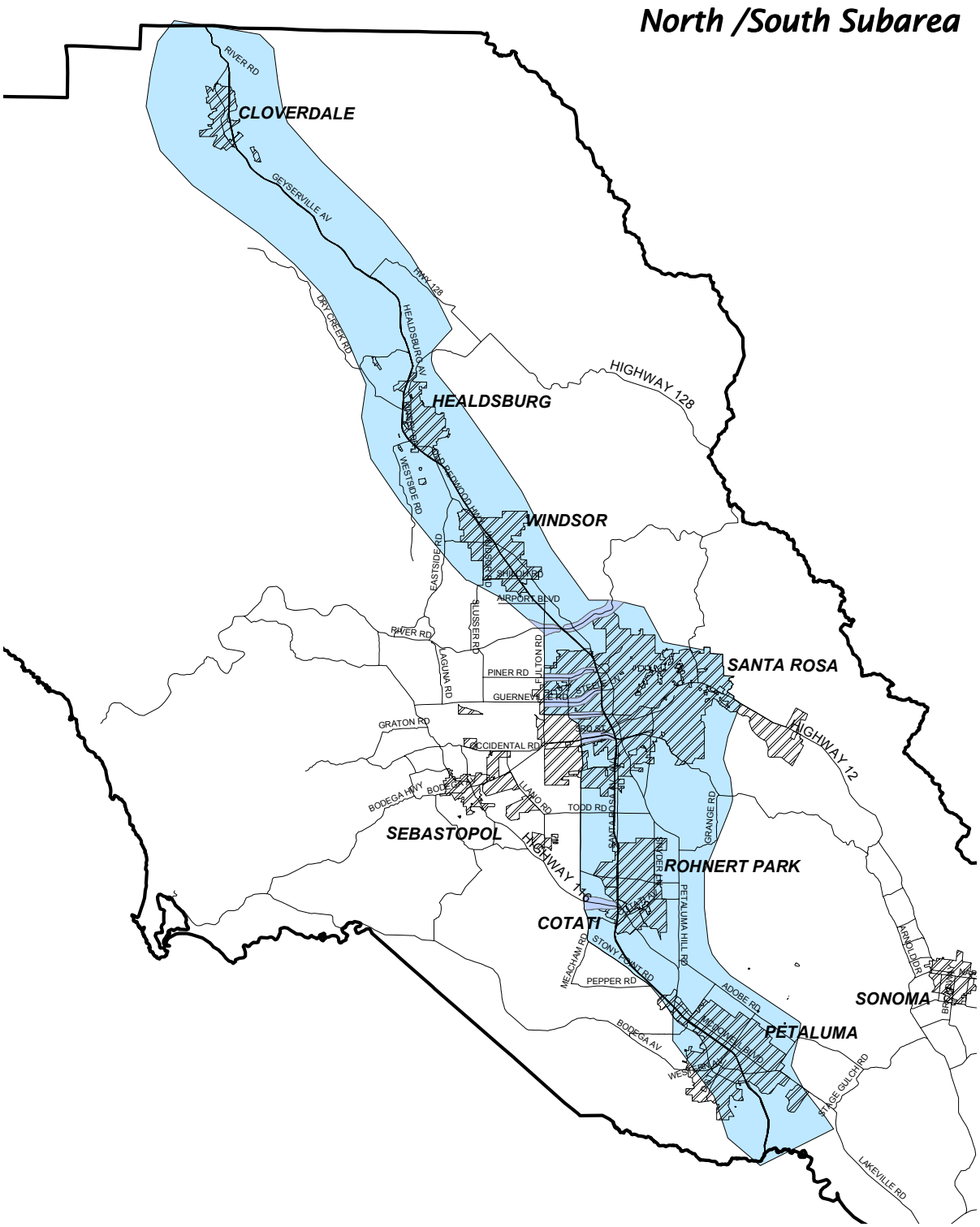
Benefits of this approach:

- It recognizes that transportation issues transcend jurisdictional boundaries.
- It fosters coordination between jurisdictions in determining common objectives and in prioritizing projects.
- It reflects the county's long-standing policy for city-centered growth.

Because of their shared needs and overall limited funding, jurisdictions have come together to determine objectives for transportation planning within their subarea.

Plan Goals

1. Relieve congestion on roads and highways.
2. Improve safety and reduce accidents for all modes, including pedestrians.
3. Improve key connection points between corridors for all modes of travel.
4. Maximize transportation funding.
5. Improve travel on Highway 101.
6. Design, implement and operate an effective, efficient and convenient passenger and freight rail system.
7. Reduce truck traffic on local streets and roads. Emphasize highway and rail for movement of goods instead.
8. Implement the countywide bicycle plan with emphasis on bicycles as a transportation alternative.
9. Develop a transportation system that is consistent with the General Plans in Sonoma County.
10. Emphasize projects that demonstrate Transit Oriented Development.
11. Make Sonoma County roads and highways more easily navigable for tourists.
12. Enhance bus transit service.
13. Provide facilities to allow functional transfers between modes.


North /South Subarea
CLOVERDALE
HEALDSBURG
WINDSOR
SANTA ROSA
SEBASTOPOL
ROHNERT PARK
COTATI
SONOMA
PETALUMA
HIGHWAY 128
HIGHWAY 12
HIGHWAY 116
RIVER RD
GEYSERVILLE AV
DRY CREEK RD
HEALDSBURG AV
WESTSIDE RD
EASTSIDE RD
OLD REDWOOD HWY
SHILOH RD
AIRPORT BLVD
BLUSSER RD
LAGUNA RD
PINER RD
GUERNEVILLE RD
GRATON RD
OCCIDENTAL RD
BODEGA HWY
LLANO RD
TODD RD
STONY POINT RD
GRANGE RD
PETALUMA HILL RD
MEACHAM RD
PEPPER RD
ADOBE RD
BODEGA AV
LAKEVILLE RD

North/South Subarea

The North/South Subarea is the primary corridor for north-south through traffic within the county. This subarea is the most urban in Sonoma County and has seven cities within it.

Santa Rosa has the greatest population and the highest number of job sites in the county. Roadways in Santa Rosa serve local traffic as well as through traffic within the county.

The more rural routes of Petaluma Hill Road to the east and Stony Point to the west have increased traffic from motorists attempting to bypass freeway congestion. There is congestion at the intersection of Adobe Road and Petaluma Hill Road. Old Redwood Highway connects Petaluma to Rohnert Park and serves as mainstreet for Cotati.

State Route 12 is the primary east-west route through Santa Rosa and serves as a connector to Highway 101. Fountaingrove Parkway and Mark West Springs Road are serving increased through traffic as well as local traffic. On the west side of Santa Rosa Piner, Guerneville and Todd Roads connect the West Subarea to Santa Rosa and Highway 101.

Seven of the nine Sonoma County cities are within the North/South Subarea. They are Cloverdale, Healdsburg, Windsor, Santa Rosa, Rohnert Park, Cotati and Petaluma.

North/South Subarea Objectives

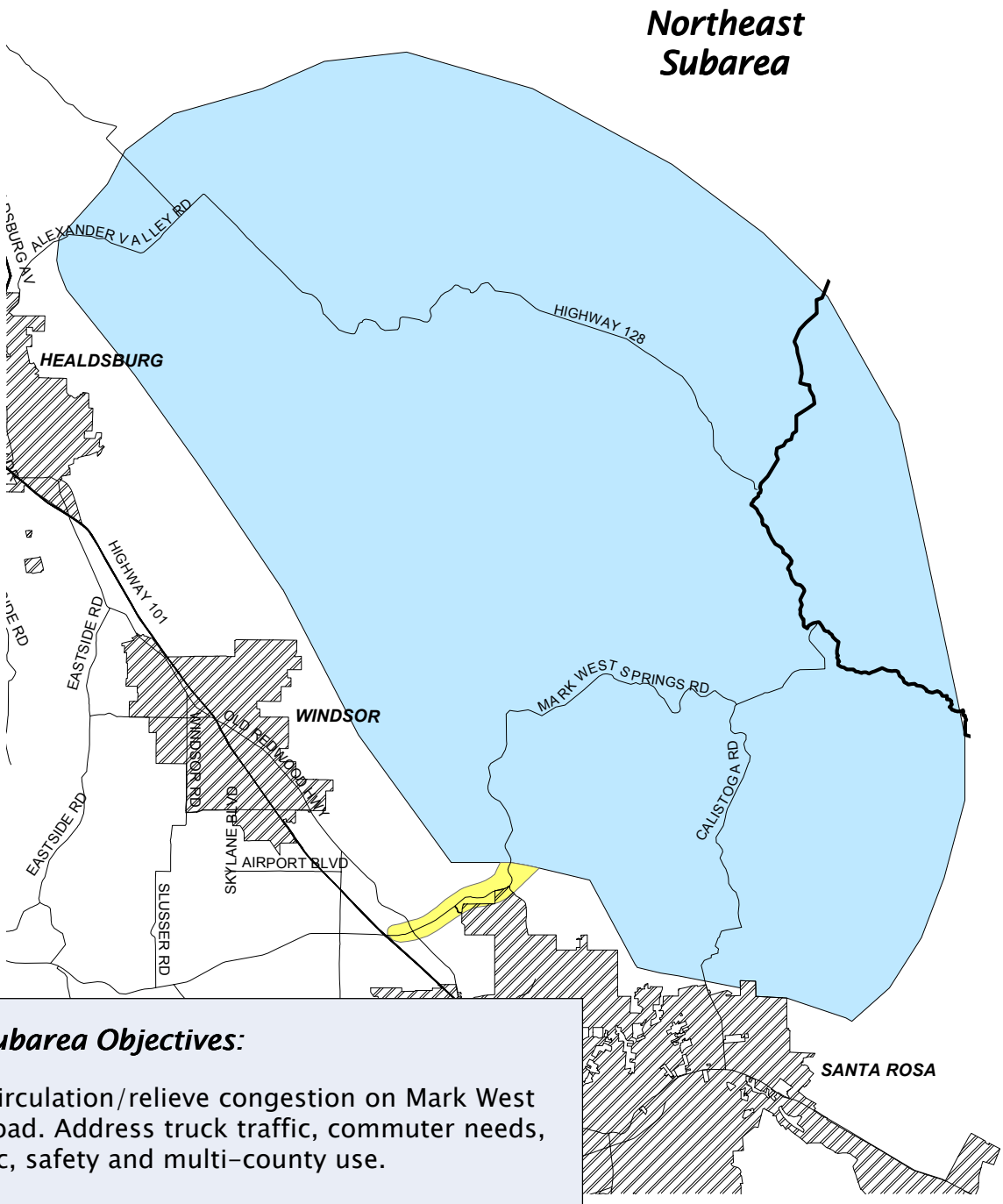
1. Relieve congestion on Petaluma Hill Road at Adobe Road and between Snyder Lane and Santa Rosa Avenue.
2. Discourage through truck traffic on Old Redwood Highway in Cotati.
3. Keep through traffic on Highway 101.
4. Improve bike safety and bike continuity through Petaluma.
5. Relieve congestion at the key connection point of Stony Point Road/Highway 101/Petaluma Boulevard.
6. Improve east Petaluma and inter-city transit service.
7. Improve rail crossings and seek funds for grade separations.
8. Relieve congestion on Stony Point between Hearn Avenue and Highway 12.
9. Increase the number of transit trips throughout the subarea.
10. Create functional access to rail.
11. Improve the intersection at Old Redwood Highway and Fulton Road to relieve congestion and improve bike traffic.
12. Create bicycle "alternative routes" that don't go through cities.
13. Improve access to Hwy 101 in Central Healdsburg.
14. Seismically retrofit bridges north of Healdsburg to maintain emergency access and for serviceability.
15. Relieve truck traffic and congestion in southern Healdsburg.
16. Improve access to jobsites at Airport Business Park and Fountaingrove area.
17. Improve east-west traffic flow in northern Santa Rosa.
18. Improve access to and overall circulation at the Charles M. Schultz Regional Airport.
19. Expand bus transit service between Santa Rosa and Cloverdale.

North/South Subarea Roads			
Rank	Jurisdiction	Project	Cost
1	County	Penngrove Traffic Circulation Improvements	$15,000,000
1	Santa Rosa	Farmers Lane Extension - construct 3 or 4 new lanes from Yolanda Ave to Hwy 12	$20,000,000
1	Santa Rosa	Fulton Road Improvements (combined)	$18,000,000
1	County	Airport Blvd Widening to 4 Lanes	$10,800,000
5	Multi	Old Redwood Hwy improvements from Petaluma to Cotati	$6,000,000
5	Santa Rosa	Stony Point Rd widen & reconstruct from Hwy 12 to Northpoint Pkwy	$10,000,000
5	County	Brickway Blvd Connect Airport Blvd.-River Rd	$7,500,000
8	County	Adobe Road Reconstruction - reconstruct portions of Adobe Rd from Hwy 116 to Penngrove	$11,500,000
8	County	Petaluma Hill Rd -Santa Rosa to Roberts (sections) - widen from Santa Rosa to Roberts	$13,000,000
8	Rohnert Park	Snyder Lane Widening - widen to 4 lanes from Southwest Blvd to Keiser Lane	$1,000,000
8	Santa Rosa	Petaluma Hill Rd in Santa Rosa - widen and reconstruct from Snyder Lane to Kawana Springs Rd	$8,700,000
12	Cloverdale	Cloverdale Blvd/South Interchange Improvement near Hwy 101	$500,000
12	Cotati/Rohnert Park	E Cotati Ave Hwy 101 to Snyder - implement arterial management	$1,100,000
12	County	Bennett Valley Rd Santa Rosa - Grange - reconstruct & widen	$3,800,000
12	Healdsburg	S. Healdsburg Ave./Mill St. Improvements	$500,000
12	Windsor	Old Redwood Hwy - Hembree Ln to Shiloh Road**	$5,452,300
12	Windsor	Shiloh Rd - Hembree Ln to Old Redwood Hwy**	$2,456,000

North/South Subarea Roads continued			
Rank	Jurisdiction	Project	Cost
12	Windsor	Windsor River Rd – widen & reconstruct from Windsor Rd to Starr Rd**	$537,100
19	Cotati	Railroad Ave Improvements – from Hwy 101 to Petaluma Hill Road	$550,000
19	Petaluma	Southern Crossing of the Petaluma River	$33,000,000
19	Windsor	Starr Rd/NWPRR rebuild Grade Crossing**	$397,000
22	County	Dry Creek Road – Safety Improvements	$4,100,000
23	Cloverdale	First Street Improvement – widen from Crocker Road to Asti Road & install sidewalk	$220,000
23	County	Bellevue Ave extension to Petaluma Hill Road	$5,000,000
23	County	South Wright extension to Todd Road	$5,000,000
23	County	Todd Road – reconstruct from Stony Point Road to Llano Road extend east to Petaluma Hill Road	$5,800,000
23	County/ Cotati	W Sierra Arterial Improvements – Old Redwood Hwy to Stony Point Road signalization & bike lanes	$825,000
23	Santa Rosa	Davis Street & 6th Street Traffic Signal Installation	$250,000
23	Santa Rosa	Dutton Meadows – widen & reconstruct from Hearn Ave to Bellevue Avenue	$4,500,000
23	Santa Rosa	New traffic signals – citywide in Santa Rosa	$2,373,000
23	Santa Rosa	West Avenue – reconstruct and widen from Sebastopol Road to South Avenue	$1,375,000
23	Windsor	Old Redwood Hwy – widen from Arata Lane to North Town Limits**	$1,643,400
23	Windsor	Old Redwood Hwy – Windsor Road to Windsor River Road**	$445,600
23	Windsor	Shiloh Rd – widen to four lanes from Hwy 101 to Skylane Blvd**	$2,363,000
NR	Petaluma	Petaluma Blvd North–Hwy 101 to city limits (approx 300 ft north of Gossage)	$3,800,000
NR –Not Ranked		** Windsor road improvements include bicycle path facilities.	

North/South Bicycle/Pedestrian Paths			
Rank	Jurisdiction	Project	Cost
1	County	Old Redwood Hwy Petaluma-Cotati - widen shoulders, install Class II signs/striping*	$24,800
2	Cloverdale	City-wide Bike lane striping in Cloverdale	$55,000
2	Santa Rosa	Stony Point Rd - install Class I bike Ln from Santa Rosa Creek to Bellevue Ave*	$187,515
2	Santa Rosa	Old Redwood Hwy/Mendocino Ave/Santa Rosa Ave	$616,410
5	County/ Healdsburg	Healdsburg Ave-Lytton Springs - widen shoulders, install Class II signs/striping**	$141,000
5	Santa Rosa	Piner Creek	$1,350,000
5	Santa Rosa	Santa Rosa Creek (east)	$1,450,000
8	County	McCray Road - Hwy 128 to Cloverdale - widen shoulders, install Class II signs/striping	$257,600
8	County	Western Ave.-Chilano Valley Rd - widen shoulders, install Class II signs/striping	$896,700
8	Santa Rosa	W 3rd at City limits to Montgomery city limits - install Class II lanes	$1,692,700
11	County	Adobe Road - ORH to Frates - widen shoulders, install Class II signs/striping*	$50,500
11	County	Bennett Valley Road - Santa Rosa to Grange - widen shoulders, install Class II signs/striping*	$2,100
11	County	Hunter View Creek Trail (Wilfred Channel)- construct Class I pathway	$306,000
14	County	Dry Creek Road - Kinley to Skaggs Springs - widen shoulders, install Class II signs/striping*	$121,000
14	County	Petaluma Hill Road - Santa Rosa to Roberts - widen shoulders, install Class II signs/striping*	$60,200

North/South Bicycle/Pedestrian Paths continued			
Rank	Jurisdiction	Project	Cost
14	County	South Petaluma Blvd – South of Petaluma, widen shoulders, install Class II signs/striping*	$154,500
14	County	Todd Road Extension*	
14	Santa Rosa	7th St/5th St	$275,265
14	Santa Rosa	Chanate Rd/Montecito Blvd	$299,700
14	Santa Rosa	Coffey Lane/Dutton Ave	$610,065
14	Santa Rosa	Franklin Ave/North St/Brookwood Ave	$163,080
14	Santa Rosa	Humboldt St/D St/E St/Hendley Street	$393,930
14	Santa Rosa	Piner Rd/Russell Ave/Bicentennial Way	$210,195
14	Santa Rosa	Range Ave – Railroad Ave	$420,323
14	County	Brickway Blvd – connection to River Rd	TBD*
26	County	Bellevue Ave – extension to Petaluma Hill Rd – shoulders & Class II signs/striping	TBD*
26	County	Penngrove Traffic Circulation Improvements – shoulders & Class II signs/striping	TBD*
NR	Petaluma	Petaluma River Access and Enhancement Plan	$8,000,000
NR	Petaluma	Kenilworth Ped/Bike Overcross – replace in appropriate location	$5,000,000
NR	Petaluma	E. Washington Ped/Bike corridor from Adobe Rd. to Bodega Ave.	$6,000,000
NR	County	Shoulder improvements on Old Redwood Highway north Windsor limits to Healdsburg	TBD
* Costs listed for bicycle Projects are incremental over cost of corresponding road rojects.			
NR – not ranked			



Northeast Subarea Objectives:

1. Improve circulation/relieve congestion on Mark West Springs Road. Address truck traffic, commuter needs, bike traffic, safety and multi-county use.

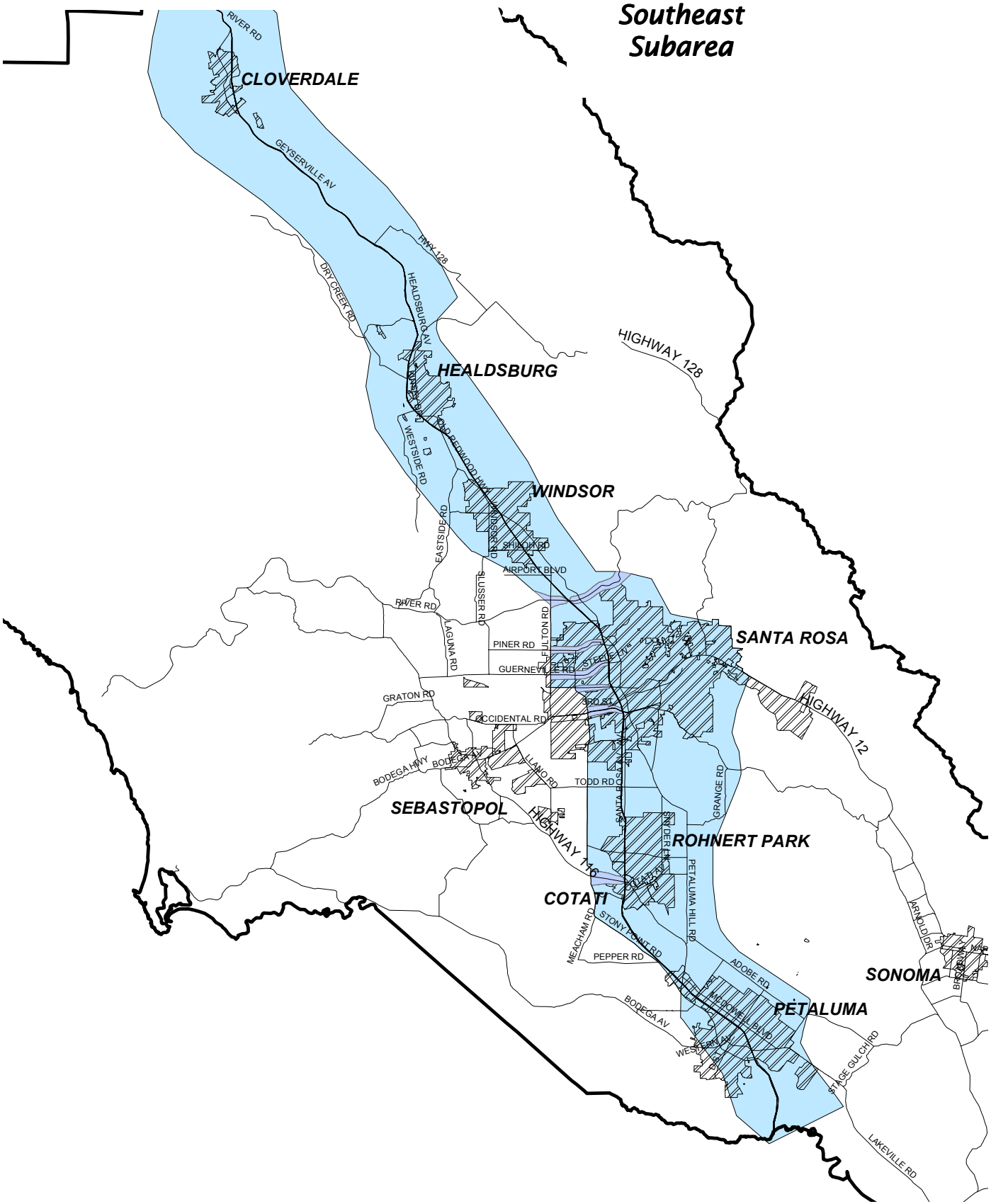
2. Improve safety on Calistoga Road and Alexander Valley Road. Address truck and commute traffic.

Northeast Subarea

The dominating characteristics of the Northeast Subarea are the corridors that link Sonoma County to Napa County. Mark West Springs Road, Calistoga Road, and Petrified Forest Road have become thoroughfares with traffic moving as quickly as the narrow, hilly terrain will allow. This area is primarily rural and rural residential. Although there are few intersections there are many driveways off these roads, creating a hazardous situation, especially at commute times.

There are no jurisdictions entirely within the northeastern subarea although Santa Rosa, Windsor and Healdsburg are on the borders.

Northeast Subarea Roads			
Rank	Jurisdiction	Project	Cost
1	County	Mark West Springs–Porter Creek Rd –Improve & widen narrow sections, increase shoulder width	$4,800,000
2	County	Alexander Valley Rd – shoulder widening for bikes & sight distance, eliminate safety issues	$4,100,000
2	Santa Rosa/ County	Calistoga Rd – Montecito to Hwy 12 – traffic calming	$250,000
Northeast Bicyles/Pedestrian Paths			
Rank	Jurisdiction	Project	Cost
1	County	Mark West Springs Road – Porter Creek Road	See road project
2	County	Alexander Valley Road – shoulder widening for bikes & sight distance, eliminate safety issues	See road project


Southeast
Subarea
CLOVERDALE
HEALDSBURG
WINDSOR
SANTA ROSA
SEBASTOPOL
ROHNERT PARK
COTATI
SONOMA
PETALUMA
HIGHWAY 128
HIGHWAY 12
HIGHWAY 116
RIVER RD
GEYSERVILLE AV
DRY CREEK RD
HEALDSBURG AV
OLD REDWOOD HWY
WESTSIDE RD
EASTSIDE RD
SHILOH RD
AIRPORT BLVD
SLUSSER RD
LAGUNA RD
FULTON RD
PINER RD
GUERNEVILLE RD
STEELE LN
GRATON RD
OCCIDENTAL RD
3RD ST
BODEGA HWY
LLANO RD
TODD RD
GRANGE RD
PETALUMA HILL RD
STONY POINT RD
MEACHAM RD
PEPPER RD
ADOBE RD
MCDOWELL BLVD
BODEGA AV
WESTRIN
STAGE GULCH RD
LAKEVILLE RD
ARNOLD DR
BROADWAY

Southeast Subarea

The Southeastern Subarea has several distinctive travel corridors including Santa Rosa to Sonoma and the Highway 37 connectors of Lakeville Road and Adobe Road, and Highway 121. All of these routes serve heavy commuting traffic and act as relievers to Highway 101. Except for travel within the city of Sonoma all of the routes are rural or rural residential.

The Santa Rosa to Sonoma corridor is served primarily by Highway 12. Winding through the Sonoma Valley, it has commute traffic during the week and tourist traffic on the weekends. Arnold Drive relieves some of this traffic on the southern end of the stretch and also connects to additional recreation sites.

Adobe Road, Lakeville Road, and Stage Gulch Road are connectors and relievers to other major routes (Highway 101 and Highway 37). They also handle residential and agricultural traffic.

Many of the intersections in the southern part of the Subarea are controlled by stop signs. This is adequate except during commute time when long waits are typical.

Sonoma is the only city entirely within the southeastern Subarea. The communities of Kenwood, and Glen Ellen are also within the Subarea. Santa Rosa is on the western edge of the subarea.

Southeast Subarea Objectives:

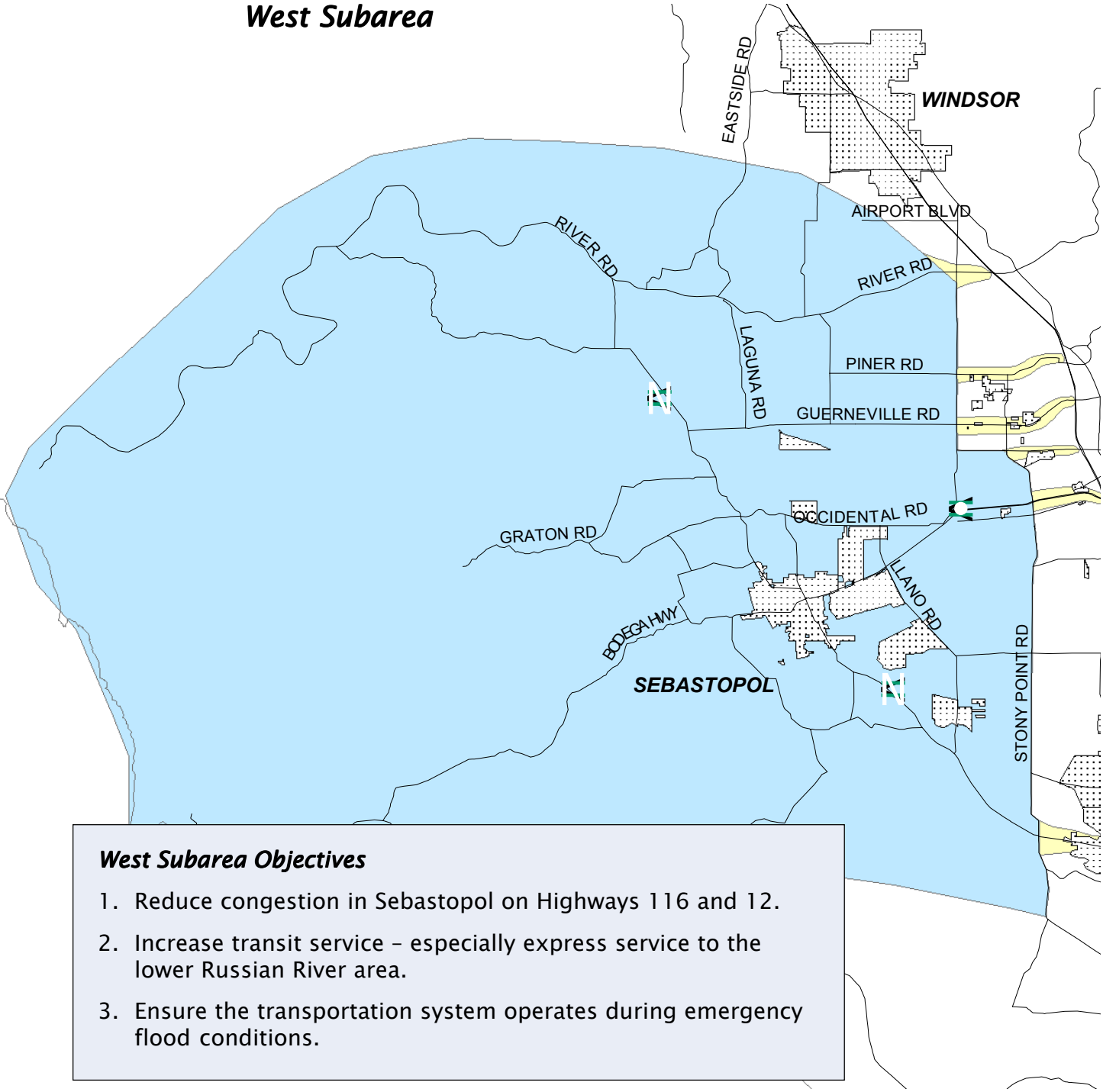
1. Relieve congestion on Highway 12 in Sonoma through Agua Caliente.
2. Relieve congestion and make safety improvements within the 121/12/116/Arnold Drive corridor including 8th Street East, Broadway and other intersections.
3. Increase and enhance transit service as follows:
   - On Route 30 for students
   - Reinstate weekend service on Route 40 between Petaluma and Sonoma
   - Improve transit service to Napa County
   - Provide feeder bus service to rail
4. Address emergency vehicle and safety issues on Highway 12 in the Oakmont area.
5. Improve rail crossings and seek funds for grade separations.
6. Study participation in future ferry service.

Southeast Roads			
Rank	Jurisdiction	Project	Cost
1	County	Hwy 116 Adobe to Arnold	$15,000,000
1	County	Hwy116/Hwy 121 intersection	$5,000,000
1	County	5 signals mid valley (2 on Arnold Dr., 3 on Hwy 12)	TBD
4	County	Lakeville Rd Widen to 4 Lanes from Hwy 37 to Hwy 116	$22,000,000
4	County	Arnold Drive – construct center turn lane Country Club to Madrone	$2,500,000
4	Santa Rosa	Hwy 12 – widen from Los Alamos to Pythian	$15,000,000
4	County	Arnold Drive – Verano to Petaluma	$2,300,000
8	County	8th Street East/Hwy 121 intersection	TBD
8	Santa Rosa	Farmers/4th Street – intersection improvements	$1,500,000
10	County	8th Street East widening Napa Rd to Napa Street	TBD
NR	Sonoma	Sonoma Traffic Circulation Improvements	TBD
NR – not ranked			

Southeast Bicycle/Pedestrian Paths			
Rank	Jurisdiction	Project	Cost
1	County	Hwy 116 – Adobe to Arnold – widen shoulders, install Class III signs*	$3,200
2	County	Arnold Drive – Country Club to Madrone – widen shoulders, install Class II signs/striping*	$18,000
3	County	Central Sonoma Valley Trail – construct Class I pathway	$256,700
4	County	Hwy 12 – Warm Springs Road to Boyes Blvd – widen shoulders, install Class II signs/striping	$2,252,600
5	County	Sonoma – Schellville Trail – construct Class I pathway	$637,500
6	County	Petaluma Ave – Riverside Drive – widen shoulders, install Class II signs/striping	$366,900
7	County	8th Street East – Napa Road to Napa Street – shoulders & Class II signs/striping*	TBD

* Costs listed for bicycle projects are incremental need over the cost of corresponding road projects.

West Subarea



West Subarea Objectives

1. Reduce congestion in Sebastopol on Highways 116 and 12.
2. Increase transit service – especially express service to the lower Russian River area.
3. Ensure the transportation system operates during emergency flood conditions.

West Subarea

This subarea includes the city of Sebastopol and the communities of Forestville, Graton, Bodega, all of the communities along the Russian River and the western edge of Santa Rosa. Much of this subarea is a highly populated area of primarily low-density residential development. Most traffic is generated by residents within the subarea, although there is a significant amount of traffic to the coast and the Russian River that originates outside of the West subarea. Included in this subarea are well traveled corridors to the coast and north-south connectors.

Important components of the West Subarea are the roads connecting west Santa Rosa to Highway 116 and Bodega Highway and Highway 116 connecting Cotati (and Highway 101) with Sebastopol and destinations beyond.

Jurisdictions in the West subarea include part of the city of Santa Rosa, the city of Sebastopol, the communities of Forestville, Graton, Occidental, Bodega and Bodega Bay. Along the Russian River are the communities of Guerneville, Monte Rio, Duncan Mills and many small neighborhood-communities that depend on River Road as their primary thoroughfare.

West Subarea Roads

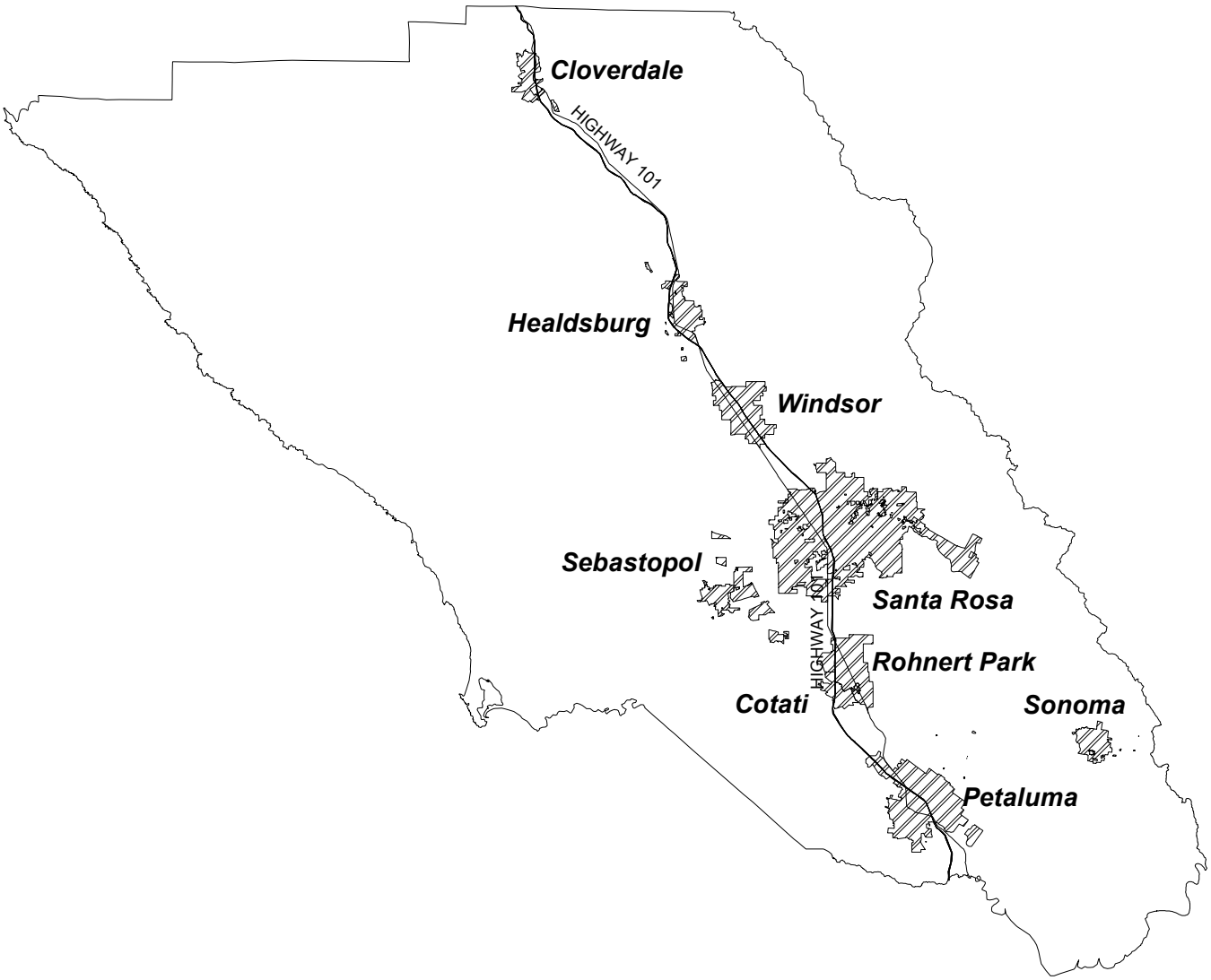
Rank	Jurisdiction	Project	Cost
1	County	River Road Channelization & Signals – Fulton to Guerneville	$10,000,000
1	Santa Rosa	Highway 12 – construct an I/C at Fulton Road	$15,000,000
1	County	Forestville Bypass – bypass Hwy 116 through Forestville	$3,600,000
4	County	Bodega Hwy, west of Sebastopol, Upgrade unimproved sect to 36' – full reconstruct	$5,500,000
4	County/ Sebastopol	Hwy 116 Cotati –Sebastopol 3rd lane & signals	TBD
4	Sebastopol	Intersection Control on Hwy 116 at 4 locations in Sebastopol	$1,365,000

list continued on next page

West Subarea Roads continued			
Rank	Jurisdiction	Project	Cost
7	County	River Rd/Mark West Springs – construct 2 additional lanes from Fulton to Old Redwood Hwy.	$2,600,000
8	County	Bellevue Ave/Ludwig Ave Connector – realignment of Bellevue from Ludwig to Stony Point Road	$2,900,000
8	County	Hwy 12 widening Llano Road to South Wright	TBD
8	County	Todd Rd – widen from Stony Point Road to Llano Road extend east to Petaluma Hill Road	$5,800,000
8	Santa Rosa	W College Ave Fulton to Stony Point Road– widen and reconstruct (includes storm drain)	$1,500,000
8	Sebastopol	Bodega Ave. Curb Gutter & Sidewalk Improvements	$421,000
8	Sebastopol	Hwy 116 Curb Gutter & Sidewalk Improvements	$650,000
14	Santa Rosa	Hearn Avenue realignment – from Corby Avenue to Northpoint Parkway	$6,000,000
14	Santa Rosa	Sebastopol Road – South Wright to Corporate Drive	$7,000,000
14	Santa Rosa	Sebastopol Road. – upgrade and reconstruct from Olive to Dutton Avenue	$3,000,000
14	Santa Rosa	West 9th St – widen and reconstruct from Dutton Avenue to Morgan Avenue	$2,500,000
18	County	South Wright Road Extension to Todd Road	$2,900,000
18	Santa Rosa	Ludwig Avenue – widen and reconstruct from Stony Point Road to Llano Road	$12,000,000
NR	County	Sebastopol Bypass – Llano Road improvements & extension, Hwy 116 to Occidental Road	$3,000,000
NR – not ranked			

West Subarea Bicycle/Pedestrian Paths			
Rank	Jurisdiction	Project	Cost
1	Sebastopol	Street Smart Sebastopol Improvements	$1,000,000
1	County	Hwy 116 – Stony Point to Gilchrist – widen shoulders, install Class III signs*	$1,000
1	Santa Rosa	Joe Rodota Trail – Stony Point Road to downtown Santa Rosa	$2,500,000
1	Santa Rosa	Prince Memorial Greenway Santa Rosa Creek from A Street to Santa Rosa Avenue	$8,000,000
5	County	Todd Rd – Stony Point Road to Llano Road – widen shoulders, install Class II signs/striping*	$35,000
5	County	Bodega Hwy Sebastopol to Barnett Valley Road – widen shoulders, install Class III signs*	$4,400
7	County	Laguna de Santa Rosa Creek Trail – Llano Road– construct Class I pathway	$1,149,200
7	County	Mirabel Road Hwy 116 – River Road – widen shoulders, install Class II signs/striping*	$693,400
7	County	Santa Rosa Creek Trail – construct Class I pathway	$644,300
10	County	River Rd – Old Redwood Hwy to Armstrong Woods – widen shoulders, install Class II signs/striping*	$161,100
11	County/ Santa Rosa	Roseland Creek Trail – construct Class I pathway	$380,000
12	County	Bellevue Avenue/Ludwig Avenue Connector – Shoulders & Class II signs/striping*	
12	County	Forestville Bypass – shoulders & Class II signs/striping*	
12	County	South Wright Extension to Todd Road – Shoulders & Class II signs/striping*	
12	County	Sebastopol Bypass – shoulders & Class II signs/striping*	
NR	County	Shoulder improvements on Westside Road south of West Dry Creek Road	
* Costs listed for bicycle projects are incremental need over the cost of corresponding road projects.			
NR – not ranked			

Golden Gate Corridor



Golden Gate Corridor

The Golden Gate Corridor includes projects related to U.S. Highway 101, the Northwestern Pacific Rail line and inter-county express bus service. It is of regional importance for north-south travel. Along Highway 101 are located seven of the nine cities in Sonoma County. Highway 101 connects the cities and also serves as "mainstreet" within them.

Highway 101 serves regional north-south through traffic, inter-county commuter traffic, and local traffic. This results in congestion, sometimes very heavy, during commute hours. The extremely heavy Friday evening northbound traffic and Sunday afternoon southbound traffic attests to the regional use of 101 as a thoroughfare to and from distant endpoints.

Golden Gate Corridor Objectives:

1. Improve travel on Highway 101:
   - Add High Occupancy Vehicles (HOV) and auxiliary lanes.
   - Improve interchanges.
   - Keep through traffic on the freeway.
2. Design an effective, efficient and convenient rail system.
   - Serve commuters and tourists.
   - Provide freight service.
   - Ensure siting and design of all rail stations is consistent for the whole system.
   - Coordinate good links to and facilities for other modes.
   - Ensure safety by improving rail crossings and seek funds for grade separations.
3. Provide additional park and ride lots.
4. Enhance Express Bus service.
5. Employ "Intelligent Transportation" solutions wherever possible.

Golden Gate Corridor – Highway 101 Widening Projects			
Rank	Jurisdiction	Project	Cost
1	SCTA	Widen Hwy 101 – Rohnert Park Expy to Wilfred	$30,000,000
2	SCTA	Widen Hwy 101 – Steele to Windsor River Road SB auxiliary lane Hopper to Airport	$55,000,000
3	SCTA	Widen Hwy 101 – Old Redwood Hwy to RP Expy incl. Hwy 116 Interchange (I/C)	$35,000,000
4	SCTA	Widen Hwy 101 – Marin Sonoma Narrows – Old Redwood Hwy to the County line (including NB onramp at E. Washington)	$125,000,000

Golden Gate Corridor – Rail			
Rank	Jurisdiction	Project	Cost
1	Multi	Passenger Rail capital – Cloverdale to San Rafael – Sonoma portion	$98,000,000
1	Multi	Passenger Rail – Average annual operating for Sonoma County	$4,700,000

Golden Gate Corridor –Bicycle/Pedestrian Paths			
Rank	Jurisdiction	Project	Cost
1	Multi	NWP Bicycle/pedestrian Path – Marin/Sonoma county line to Windsor northern city limit – Class I pathway –construction only (does not include possible acquisition costs)	$10,250,000
2	Santa Rosa	Hwy 101 Pedestrian Overcrossing at SRJC	$1,500,000

Golden Gate Corridor – Additional Highway 101 Projects			
Rank	Jurisdiction	Project	Cost
1	County/Cotati	Railroad Ave –Hwy 101 Interchange (I/C)	$3,100,000
1	Santa Rosa/County	Hearn Ave –Hwy 101 I/C	$8,800,000
3	Petaluma	Old Redwood Hwy Reconstruct –Hwy 101 I/C	$20,000,000
4	County	Airport Blvd –Hwy 101 I/C	TBD
5	Santa Rosa	Mendocino Ave/Hopper Ave –Hwy 101 I/C	$5,300,000
6	County	Todd Road –Hwy 101 I/C	TBD
7	County	River Road –Hwy 101 I/C	$18,000,000
7	Healdsburg	Mill St. –Hwy 101 I/C	$1,400,000
7	Petaluma	Cross Town Connector – including Hwy 101 I/C	$33,000,000
7	Santa Rosa	Bellevue Ave –Hwy 101 I/C	$15,000,000
11	Healdsburg	Dry Creek –Hwy 101 I/C	$1,530,000
11	Santa Rosa	Baker Avenue –Hwy 101 I/C	TBD
11	Windsor	Shiloh Road – Hwy 101 I/C	$9,366,000
14	Santa Rosa	Hwy 12 –Hwy 101 I/C – Alternative	TBD
15	Santa Rosa	Hwy 101 – Bypass Alternative	TBD
16	Santa Rosa	Hwy 101 – Tunnel Alternative	$230,000,000

Transit Projects

This transit plan for the next 25 years includes operations and capital to maintain and to expand service. The cost to expand service to late evenings requires the capital cost of bus purchase, the operating cost (estimated at $1 million annually for Santa Rosa) and corresponding paratransit expansion costs.

Several factors are anticipated to affect transit service. They are the growing need for paratransit, the expanding demand for commuter service and coordination with other transit operators including rail.

Santa Rosa Transit	Cost
Paratransit Fleet Expansion 2002, 2005, 2008	$1,080,000
Paratransit Fleet Replacement – 2004	$300,000
Paratransit Fleet Replacement – 2010	$390,000
Paratransit Fleet Replacement – 2016	$510,000
Transit Transfer Facilities – various years	$8,000,000
Bus Maintenance Facility Expansion 2002/03	$2,625,000
Transit Support Vehicles – various years	$350,000
New Routes to Growing Areas of Santa Rosa – 2004	$1,077,000
Replacement Bus Fleet – 2010	$9,100,000
Replacement Bus Fleet – 2022	13,000,000
5 Expansion Buses – 2003	$1,375,000
Evening and weekend service – 2004	$1,978,000
Continuation of Bus Service/Paratransit Service	$5,750,000/yr
Capital replacement costs	$31,650,000
Capital expansion costs	$5,077,000

Sonoma County Transit	Cost
FY 2008 – 40' Natural Gas Bus Replacements	$6,918,000
FY 2009 – 35' Natural Gas Bus Replacement	$450,000
FY 2012 – 30' Natural Gas Bus Replacement	$1,661,000
FY 2012 – 40' Natural Gas Bus Replacement	$6,918,000
FY 2014 – 40' Natural Gas Bus Replacement	$6,157,000
FY 2014 – 40' OTR Coach Replacement	$624,000
FY 2020 – 40' Natural Gas Bus Replacement	$11,179,000
FY 2021 – 35' Natural Gas Bus Replacement	$700,000
FY 2024 – 30' Natural Gas Bus Replacement	$2,368,000
FY 2024 – 40' Natural Gas Bus Replacement	$6,710,000
FY 2026 – 40' Natural Gas Bus Replacement	$6,157,000
FY 2026 – 40' OTR Coach Replacement	$890,000
Capital replacement costs	$50,732,000
Annual Operations	$9,000,000/yr
Expand Transit Operations & Maintenance Facilities	$8,000,000
Phase I Capital Bus Expansion	$6,600,000
Phase I Service Expansion on Rtes 20, 30, 44/48 & 60	$770,000
Phase II Capital Bus Expansion	$4,450,000
Phase II Service –New Express on Rtes 20, 30, 44/48 & 60	$385,000
Phase III Capital Bus Expansion	$2,200,000
Phase III Service – Expand Local Transit Service	$400,000
Phase IV Capital Bus Expansion	$1,000,000
Phase IV Service – New Feeder Service for Rail	$400,000
Capital expansion costs	$24,205,000

Petaluma Transit	Cost
New Bus Purchases (2001& 2013)	$8,000,000
Increase Hours of Transit Service	$400,000/yr
Increase Transit Facilities – Various Loc in Pet.	$600,000
Feeder Service to Railroad/Park and Ride	$150,000/yr
Annual operating – fixed route	$925,000/yr
Annual operation – Paratransit	$340,000/yr
Capital replacement costs	$8,000,000
Capital expansion costs	$600,000

Golden Gate Transit	Cost
Port Sonoma Ferry service	$25,000,000
Expansion of Sonoma to Marin service	TBD
Expansion of Sonoma to San Francisco service	TBD
Rehab yard in Sonoma County	TBD

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) is defined in TEA-21 as "electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system. ITS refers to electronic and communication systems that can be used for collecting, processing, disseminating or acting on information in real time to improve the operation, safety, or convenience of the transportation system(s)". A "Smart" System is an adaptive traffic signal system that uses "real time" data to set traffic signal operations, i.e. it responds to current traffic conditions to optimize traffic movement on streets.

The City of Santa Rosa plans to replace the existing citywide traffic signal system with a "Smart" Traffic Signal and Intelligent Transportation System that will adapt to continuous changing traffic conditions. This will improve traffic circulation, decrease congestion and improve the streets for all users, including bicyclists and pedestrians.

The "Smart" system works by using high-speed personal computer traffic controllers with video detection and an interconnect wiring network that allows transmission of high levels of data and information. At intersections "Smart" signals give priority to emergency vehicles and buses and detect all vehicles, bicycles and pedestrians. Citywide the ITS has the ability to readily provide information about traffic conditions to the public, and a staff that will provide the engineering and maintenance expertise to facilitate optimal operations of the system.

Road Maintenance

Components of the Pavement Management System

Many jurisdictions respond to funding shortages by deferring preventative maintenance, which causes roadway systems to deteriorate at high rates. As cities and counties concentrate their limited resources on the most obvious needs, such as filling the worst potholes or reconstructing streets with the worst pavement conditions, the critical area of preventive maintenance is often neglected. Research has shown that a typical pavement deteriorates 40 percent in quality in the first 75 percent of its life, and then deteriorates another 40 percent in the next 12 percent of its life. (citation)

A Pavement Management System (PMS) allows jurisdictions to identify needs and allocate a sufficient amount of funds to preventative maintenance, which, in turn, lowers the overall cost of maintaining the street network. The cost of preventive maintenance is generally one-fifth to one-tenth the cost of repairing pavement that is 80 percent deteriorated. Studies of pavement failure and rehabilitation strategies have found that if streets are properly maintained while still in a "good" to "excellent" condition, the total sum of preventative maintenance investment is significantly less than if the pavement is allowed to deteriorate to the "poor" and "failed" conditions and is then reconstructed. The goal of PMS is to raise the condition of the street network so that preventive maintenance is the primary strategy being applied, thus minimizing long-term budget needs.

The Pavement Management System is composed of five different processes. These are (1) entering street inventory data, (2) calculating pavement conditions, (3) specifying maintenance treatments, (4) determining budget and maintenance needs, and (5) formulating budget scenarios. The following discusses these processes and identifies the information that is required in order to complete them.

Street Network Inventory

The first step in establishing a street network inventory is to divide the streets into numbered sections, usually based on city blocks. Each section consists of a street segment that is uniform in its condition, surface type, and width. These sections are the basic management units of the PMS.

Geometric and historical information is entered into the PMS database for each maintenance section. This data includes the section number, beginning point, end point, length, width, surface type, number of lanes, year of construction, and functional class of each section.

A typical inspection unit, usually 100 feet in length for most city streets, is selected from each street section for more careful examination. The inspection unit chosen is typically representative of the condition of the street section as a whole. Generally, an inspection unit includes at least 10 percent of the area of the street section.

Each inspection unit is surveyed for pavement distress ineach of the following categories:

- Alligator cracking
- Block cracking
- Distortions
- Patching
- Rutting
- Weathering
- Longitudinal and transverse cracking

The guidelines that are followed for inspecting pavement can be found in the Manual for Pavement Condition Index Distress Identification as published by MTC. Once the information is collected, the distress information is entered into the PMS program with the respective quantities and levels of severity.

Pavement Condition Calculation

When the street section information is entered into the program, the PMS program determines pavement conditions based on a rating scheme developed by MTC. The condition of each of the street sections is described by a Pavement Condition Index (PCI) number, based on the distress observed when the section was inspected. The Pavement Condition Index values range from "Very Good" (PCI = 70 to 100) to "Failed" (PCI = 0 to 25). PCI value calculations are based on accumulated data and pavement testing done by the U.S. Army Construction Engineering Research Laboratory and used within MTC's program. The program initially assumes each section to be in perfect condition, and lowers its PCI for every distress recorded when it was inspected.

The PCI is separated into five categories that describe the extent of pavement deterioration. Deterioration may be caused by load-related distresses, the environment, or both.

The following PCI breakdown is used for typical City streets:			
Category I	100 > PCI > 70	non load–related distress	Very good condition
Category II	70 > PCI> 50	non load–related distress	Good/fair condition
Category III	70 > PCI > 50	load–related distress	Good/fair condition
Category IV	50 > PCI > 25	load–related distress	Fair/poor condition
Category V	25 > PCI > 0	load–related distress	Very poor condition

Preventative Maintenance and Rehabilitation Treatment Specification

The PMS program requires a jurisdiction to specify the preventative maintenance or rehabilitation treatment, along with its unit cost, for each PCI category. PMS software then matches each street section with an appropriate treatment based on its PCI. PCI Category II is considered "Preventive Maintenance," and usually requires crack sealing, slurry seals, or thin overlays. PCI Categories III, IV and V are considered "Rehabilitation". Rehabilitation treatments range from thin overlays (Category III), to thick overlays (Category IV), to full pavement reconstruction (Category V).

The PMS program also allows the user to specify different treatment strategies for streets, corresponding to their functional classes (residential, collector, or arterial) and their different surface types, including asphalt concrete (AC), asphalt concrete over asphalt concrete (AC over AC), portland cement concrete (PCC), and asphalt concrete over portland cement concrete (AC over PCC). The MTC Pavement Management System User's Guide can be referenced for a more complete description of the process and criteria for matching the pavement condition with the maintenance type.

Rehab Needs for Sonoma County				
	Initial Cost to Raise PCI to 70		Annual Cost to Maintain PCI of 70	
Jurisdiction	Arterials & Collectors	Local Streets	Arterials & Collectors	Local Streets
Cloverdale	$150,000	$1,100,000	$150,000	$300,000
Cotati	current PCI > 70	$30,000	current PCI > 70	$200,000
County	$70,000,000	$65,000,000	$5,500,000	$7,500,000
Healdsburg	$200,000	$350,000	$350,000	$300,000
Petaluma	$42,800,000	$73,500,000	$3,500,000	$4,600,000
Rohnert Park	current PCI is 72	current PCI is 77	$400,000	$300,000
Santa Rosa	current PCI is 70	current PCI is 70	$6,000,000	$8,000,000
Sebastopol	$600,000	$125,000.00	$265,000	$250,000
Sonoma	current PCI is 70	current PCI is 72	$140,000	$100,000
Windsor	$300,000	current PCI > 70	$825,000	$0
Totals	$114,050,000	$140,105,000	$25,130,000	$13,550,000
Based on 5% inflation rate and 5% interest rate.				
If multiple years were reported the highest amount is listed here.				
Source: Public Works Departments in each jurisdiction.				

Chapter 5

Funding and Implementation

The previous chapter, Transportation Needs, describes the regional and local vision for transportation improvements. This chapter will explain funding sources and the inevitable funding constraints that are prevalent when needs far outweigh the resources available. In transportation, hard decisions are made weighing the impact of maintaining and rehabilitating the system and offering expanded options to system users.

MAJOR REVENUE SOURCES

The SCTA has oversight over the distribution of nearly all state and federal funding for transportation in Sonoma County. Most of these funds come to the SCTA through the Metropolitan Transportation Commission (MTC) – the regional transportation and planning agency for the Bay Area. During FY1999/2000 the SCTA was responsible for programming over $60 million to projects ranging from highways to buses to bikes.

Most of the money used for transportation projects is generated from the taxpayers that pay fuel, sales and other taxes and fees. These tax dollars flow into federal, state and local funding pots. The Federal funds are used primarily for capital projects such as new highways and rail construction. State funds go to capital projects and cover maintenance and operations of our state highway system. Local funds are used for capital, operations, and maintenance, as well as to match federal and state grants.

Federal Funding Programs

Surface Transportation Program / Congestion Mitigation Air Quality (STP/CMAQ)

The STP/CMAQ funding programs were part of the Federal Intermodal Surface Transportation Equity Act of 1991 (ISTEA) and were continued in the 1997 Transportation Equity Act for the 21st Century (TEA-21). STP and CMAQ are called flexible funds because they are not restricted to particular modes. CMAQ funds are limited to implementation of the projects that improve air quality. The majority of Federal transportation funding is used for capital projects, such as new highway and rail construction, and for specific projects earmarked by Congress.

Eligible uses for STP funds include:

- Roadway or transit rehab
- Transit facilities
- Port facilities
- Operational improvements
- Intermodal

Eligible uses for CMAQ funds include:

- Bicycle paths
- Transit
- Signal Coordination

Transportation Enhancement Activities (TEA)

TEA-21 requires a 10% set-aside for the state's STP allocation to be used for Transportation Enhancement Activities (TEA) above and beyond normal capital improvements. MTC estimates that Sonoma County will receive approximately $13 million in TEA funds over the next 25 years. The SCTA programs a portion of that money while the remaining TEA money is programmed by MTC to a program called Transportation Livable Communities (TLC) for small scale, community and transit oriented projects.

Eligible uses for TEA funds include:

- Bicycle paths
- Pedestrian paths
- Rehabilitation of historic projects linked to transportation

State and Federal Funding Programs

State Transportation Improvement Program (STIP)

The STIP is the largest source of transportation funds made available to the county and is derived from the State and Federal gas tax. The funds may be used for capacity-expanding capital transportation projects and for road rehabilitation. The SCTA programs STIP funds every two years. As one of the only funds available for capacity increasing projects the SCTA has traditionally funded Highway 101 improvements from the STIP.

State Transit Assistance (STA)

These funds may be used for transit capital projects and transit operations and are claimed directly by public transit operators. These funds are generated by a statewide ¼ cent sales tax on gasoline and diesel.

Transit Development Act (TDA)

TDA funds are the largest single source for transit operating and capital. These funds are generated by a statewide ¼ cent sales tax.

Articles 4, 4.5 and 8

TDA Article 4 and TDA Article 8 provide transit operating assistance and capital projects. TDA Article 4.5 funds paratransit operating and capital projects and represent 5% of total TDA revenue.

Article 3

Each year the SCTA reviews and adopts a program of projects for bicycles and pedestrians to be funded through the TDA Article 3 program. These funds are generated as part of the sales tax and represent approximately 2% of the total TDA funds received in the county.

Gas Tax Subventions

A portion of the State sales tax on gasoline and diesel goes directly to the cities and counties for streets and roads maintenance. This is distributed by a formula based on population and road miles.

Other Funding Programs

Traffic Congestion Relief Program (TCRP)

Governor Gray Davis and the State Legislature approved a list of projects called the Traffic Congestion Relief Program in the FY2000/2001 State budget. These projects are slated to receive one-time only State funds from the General Fund and the sales tax on gasoline tax. The SCTA lobbied for inclusion in the program and Sonoma County did receive funding for four projects:

- Highway 101 at the Marin/Sonoma Narrows – $21 million
- Steele Lane Interchange – $6 million (to fully fund the project)
- Passenger rail service (SMART) – $37 million
- NCRA Rail rehabilitation - $60 million (this project is in several counties including Sonoma)

Also included in the TCRP is additional funding for rehabilitation of local streets and roads and increased STIP funding.

Transportation Funds for Clean Air (TFCA)

The SCTA is the program manager for the TFCA funds that come into Sonoma County. These funds are generated through a four-dollar surcharge on vehicle registrations within the Bay Area Air Quality Management District. The Air District covers the southern half of the county (Windsor south). These funds can only be used on specific projects deemed eligible by the Air District. Each year the SCTA approves a program of projects and submits it to the Air District for approval.

Grant Anticipation Revenue Vehicle (GARVEE) Bonds

GARVEE Bonds provide access to a portion of future STIP funds for earlier programming to STIP eligible projects. The federal government established the GARVEE Bond program and the bonds are issued by the state. GARVEE Bonds are repaid by future federal gas tax revenues.

Sales Tax – Self Help Counties

In the Bay Area voters in five counties have passed sales taxes to pay for transportation improvements. In 1998 and again in 2000 Sonoma County voters have had the opportunity to vote for a county sales tax to supplement funding for highways, streets and road, buses and rail. The vote required for the passage of a tax was not reached in either election.

In order to pay for many of the projects described in the *2001 Plan* Project List a local source of revenue, such as a sales tax, is required.

Specialized Funding Sources

In addition to the programs described here, smaller, more specialized programs are available to local jurisdictions for specific projects. The State, with the passage of Proposition 116, provides funding for rail projects with a local match and demonstration of ability to operate. The State and Federal governments offer grants through the Office of Traffic Safety and the Safe Routes to School program that are targeted to small scale safety oriented projects. Local jurisdictions also fund transportation projects through Community Development Block Grants and development mitigation fees as well as from their own general funds.

IMPLEMENTATION

After a project is included in a plan the hard work really begins. Once the source, or more often the multiple sources of funding are identified there must be environmental review, engineering and design work completed before construction can begin. Time and resources are the primary constraints in implementing a project.

As an example, the City of Santa Rosa receives approximately $1.8 million in state gas taxes annually to fund its transportation projects. This is the only dedicated source of funds available for pavement rehabilitation. An annual expenditure of about $7.5 million would be needed to maintain the investment in the City's existing pavement system, so the backlog of needed repaving projects grows by about $5.5 million per year. In the long run, deferred maintenance increases costs significantly. Santa Rosa's situation is typical of the other jurisdictions in the county.

MTC has published a booklet called Moving Costs that describes the funding programs in greater detail. It is available to the public at MTC's website (www.mtc.ca.gov).

Implementation Process

The following table illustrates which level of government controls which types of transportation revenues. A bottom up process is key to identifying funding projects.

Level	Revenues Controlled	Agency	Related Documents
State	State Transportation Improvement Program (STIP)	CTC	STIP Policy Resolutions Regional Transportation Plan (RTP) Guidelines
Regional (Bay Area)	RSTIP & RCMAQ Transportation Development Act (TDA) State Transit Assistance (STA) revenues	MTC	RTP Policy Resolutions Countywide Plan Guidelines
Sonoma County	County STIP Allocation County RST/CMAQ Allocation Transportation Fund for Clean Air (TFCA) Funds	SCTA	Countywide Transportation Plan
Local	Local Gas Tax Property Tax Local Sales Tax Allocation Fees TDA General Funds	Local Jurisdictions Transit Operators	Local General Plans Coordinated Transit Claim Capital Improvement Plans Short Range Transit Plans

Funding a Project

In addition to the scarcity of funds compared to need, funding programs are distinct in their requirements. The public works departments of local jurisdictions must be skilled in making the best use of available funds and being creative in securing funds. The following are examples of how a local project is funded.

Bus Purchase Case Study

In July 2001, Sonoma County Transit will purchase eleven new 40' compressed natural gas (CNG) powered transit coaches from Orion Bus Industries in Oriskany, New York. Eight will be standard floor (height) buses and three will be low-floor buses. The standard floor buses will be deployed on Sonoma County Transit's intercity routes and the low-floor buses will be deployed on Rohnert Park/Cotati local routes 10, 11, 12, 14.

Total cost of this purchase is $4,366,449, which includes two spare engine packages. Funding for the project consists of a mix of Air District (Bay Area Air District and Northern Sonoma County Air Pollution Control District) funds, Federal Section 5307 (Transit formula funds), Federal TEA21 funds and local TDA funds.

Thirteen grants and allocations are being combined to fund this project. Each grant has certain funding restrictions, reporting requirements, and expenditure deadlines. Sonoma County Transit has gathered funding in anticipation of this project since 1998.

The new fleet is expected to be in service by August 2002.

Road Project Case Study

In 1992, construction began on a new "diamond" type freeway interchange at the intersection of State Route 12 and Stony Point Road. The project improves the traffic flow and operation of the intersection by separating the through Highway 12 traffic from the traffic using Stony Point Road. A new bridge on Stony Point Road was created and Highway 12 was lowered 21 feet under Stony Point Road. New freeway on and off ramps were constructed which improve the traffic flow and operation of the intersection. The project was completed in 1995.

The total cost of this project was $11,400,000. Funding for the project consisted of a mix of State and Local Transportation Partnership Program (SLTPP) funds, Petroleum Violation Escrow Account (PVEA) funds and PFIF (development fees).

Transit Providers	
Cloverdale Transit 707-894-1743 www.cloverdale.net	Serves the City of Cloverdale, connections to Sonoma County Transit
Golden Gate Transit 707-541-2000 www.goldengate.org	Serves Sonoma and Marin Counties, connections to San Francisco and Del Norte BART station, ferries between Marin and San Francisco
Healdsburg In-City Transit 707-431-3309	Serves Healdsburg, connections to Sonoma County Transit
Petaluma Transit 707-778-4460	Serves Petaluma, connections to Sonoma County Transit and Golden Gate Transit
Santa Rosa CityBus 707-543-3333	Serves Santa Rosa, connections to Sonoma County Transit and Golden Gate Transit
Sonoma County Transit 707-576-7433 www.sctransit.com	Serves Sonoma County, connections to Golden Gate Transit and Santa Rosa CityBus
Paratransit Providers	
Sonoma County Paratransit 707-576-7433 TDD: 707-585-9817	Serves Sonoma County
Volunteer Wheels 707-573-3377 TDD: 707-573-3381	Serves Santa Rosa
Petaluma People Services 707-765-8493 TDD: 800-735-2929	Serves Petaluma
Whistlestop Wheels 415-454-0964 TDD: 415-457-4630	Serves Marin County and inter-county service to Marin, Sonoma, San Francisco and western Contra Costa counties
Transportation Information	
TravInfo 817-1717 TDD:817-1718 (no area code required) www.travinfo.org	Provides information about traffic and road conditions/services, highway construction updates, bicycle organizations and connections to transit agencies information in the Bay Area
RIDES 800-755-POOL www.rides.org	Provides information for Bay Area commuters, carpool & vanpool services and park & ride lots
Roadway Conditions 800-427-7623	Statewide roadway conditions
Other Bay Area Agencies	
ABAG 510-464-7900 www.abag.ca.gov	Association of Bay Area Governments
BAAQMD 415-771-6000	Bay Area Air Quality Management District
Caltrans-District 4 510-286-4444 www.dot.ca.gov/dist4	California Department of Transportation
CHP - Golden Gate Division 707-648-4180	California Highway Patrol
MTC 510-464-7700 ww.mtc.ca.gov	Metropolitan Transportation Commission